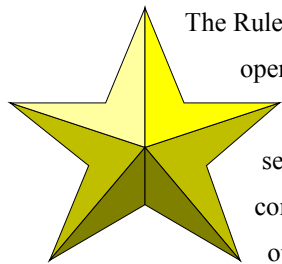


Introduction

The following questions and answers were derived from Indiana Administrative Code (IAC) Title 327 Water Pollution Control Board. Please refer to the disclaimer at the beginning of this manual. For the purpose of this manual and the certification exams, only portions of 327 IAC are represented. Please refer to the entire rule for any other purpose.



The Rules and Regulations Study Guide generally includes lengthy answers to the questions. However, operators are not expected to memorize these lengthy answers for the certification exams. Operators should be able to distinguish the correct answer to a question given the correct answer among several incorrect answers. Citations (for example, 327 IAC 2-1-1.5) are included for your convenience and will not be on the exams. Formulae sheets will be provided on exam day. Although operators are not required to memorize formulae, formulae may be presented in a different form on the exam. All operators are expected to be able to make conversions and rearrange formulae in order to complete the mathematics portion of the certification exams.

327 IAC ARTICLE 2. Water Quality Standards

1) What are the goals of the state regarding water quality?

Answer

The goals of the state regarding water quality are to restore and maintain the chemical, physical and biological integrity of the waters of the state.

In furtherance of this primary goal:

- (a) It is the public policy of the state that the discharge of toxic substances in toxic amounts be prohibited; AND
 - (b) It is the public policy of the state that the discharge of persistent and bioconcentrating toxic substances be reduced or eliminated.
- 327 IAC 2-1-1.5

2) All surface waters of the state are designated for ____A____. Also, all waters of the state, except limited use waters, must be capable of supporting a well-balanced, warm water ____B____ community.

Answer

- (a) Full-body contact recreation.
- (b) Aquatic.

327 IAC 2-1-3(a)

3) All waters at all times and at all places, including the mixing zone, shall meet the minimum conditions of being free from substances, materials, floating debris, oil, or scum attributable to municipal, industrial, agricultural, and other land use practices, or other discharges. What are four types of undesirable conditions or substances?

Answer

- (a) Substances that will settle to form putrescent or otherwise objectionable deposits.
 - (b) Substances that are in amounts sufficient to be unsightly or deleterious.
 - (c) Substances that produce color, visible oil sheen, odor, or other conditions in such degree as to create a nuisance.
 - (d) Substances which are in amounts sufficient to be acutely toxic to, or otherwise severely injure or kill aquatic life, other animals, plants, or humans.
- 327 IAC 2-1-6(a)(1)

4) Water quality standards differ for the Great Lakes region and the rest of the waters of the state. What are the four basic numerical categories of the state water quality standards for the State of Indiana?

Answer

- (a) Acute (short-term) toxicity to aquatic life.
 - (b) Chronic (long-term) toxicity to aquatic life.
 - (c) Human health effect for stream water (outside mixing zone).
 - (d) Human health effect for water at water intakes of drinking water supply.
- (327 IAC 2-1-2, outside of the Great Lakes region / 327 IAC 2-1.5-8, the Great Lakes region)

5) For a given pollutant (heavy metals, pesticides, etc.), the values of water quality criteria based on chronic aquatic toxic level are _____ than those based on acute aquatic toxic level.

Answer

Generally lower, or more stringent.

327 IAC 2-1-6(a) Tables 1&2

6) My wastewater treatment plant receives brine wastes from water softeners. Do I have to be concerned about the salt content of my discharge?

Answer

Yes. The salt discharge could increase the dissolved solids concentration of your discharge. The state water quality standards require that dissolved solids shall not exceed 750 mg/l in all waters.

327 IAC 2-1-6(a) Table 1 - footnote

7) What is the minimum dissolved oxygen requirement in surface waters of the State of Indiana?

Answer

Concentrations of dissolved oxygen shall average at least five (5.0) milligrams per liter per calendar day and shall not be less than four (4.0) milligrams per liter at any time.

327 IAC 2-1-6(b)(3)

8) The City Parks Department asked the WWTP Superintendent if the water of a local river is safe to hold a water skiing competition. What bacterial criteria should be considered when evaluating water quality for recreational use?

Answer

All waters of the state are designated for full-body recreational use and must be in compliance with the bacteriological criteria for full-body contact recreational uses for the months of April through October, inclusive. E. coli bacteria, using membrane filter (MF) count, shall not exceed 125 per 100 ml as a geometric mean based on not less than five samples equally spaced over a 30-day period, nor exceed 235 per 100 ml in any one sample in a 30-day period.

327 IAC 2-1-6(d)

9) The conditions for temperature in the waters of the state, except for Lake Michigan, are:

Answer

- (a) There shall be no abnormal temperature changes that may adversely affect aquatic life unless caused by natural conditions.
- (b) The normal daily and seasonal temperature fluctuations that existed before the addition of heat due to other than natural causes shall be maintained.
- (c) The maximum temperature rise at any time or place above natural temperatures shall not exceed five degrees Fahrenheit (5°F) in streams and three degrees Fahrenheit (3°F) in lakes and reservoirs.
- (d) Water temperatures shall not exceed the maximum limits in Table 3 during more than one percent (1%) of the hours in the twelve-month (12) period ending with any month. At no time shall the water temperature at such locations exceed the maximum limits in Table 3 by more than three degrees Fahrenheit (3°F).

327 IAC 2-1-6(b)(4)

10) Taste and odor producing substances, other than naturally occurring:

Answer

Shall not interfere with the production of a finished water by conventional treatment consisting of coagulation, sedimentation, filtration, and disinfection.

327 IAC 2-1-6(e)

11) The concentrations of either chlorides or sulfates shall not exceed _____ .

Answer

Two hundred fifty milligrams per liter (250 mg/l), other than due to naturally occurring sources.

327 IAC 2-1-6(e)

327 IAC ARTICLE 4. Wastewater Treatment Facilities; Overload Condition

1) What is the purpose of “327 IAC, Article 4, Wastewater Treatment Facilities; Overload Condition”?

Answer

The purpose is to prevent the excessive hydraulic and/or organic overloading of POTW’s or semipublic facilities resulting in the subsequent discharge or bypassing of insufficiently treated sewage due to new sewer connections to such overloaded POTW’s or semipublic facilities.

327 IAC 4-1-1

2) What is a “combined sewer”?

Answer

It is a sewer designed and employed to receive both water-carried and/or liquid wastes and storm and/or surface water.

327 IAC 4-1-2(1)

3) Define “discharge” or “direct discharge”.

Answer

When used without qualification, both terms refer to a discharge of a pollutant.

327 IAC 4-1-2(2)

4) What does “discharge of a pollutant” mean?

Answer

It means any addition of any pollutant, or combination of pollutants, into any waters of the state of Indiana from a point source in Indiana. The term includes, without limitation, additions of pollutants into waters of the state from the following:

- (a) Surface run-off that is collected or channeled by man.
- (b) Discharges through pipes, sewers, or other conveyances that do not lead to treatment works.

327 IAC 4-1-2(3)

5) Define an “effluent limitation”?

Answer

It is any restriction established by the commissioner on quantities, discharge rates, and concentrations of pollutants that are discharged or will be discharged from point sources into waters of the state of Indiana.

327 IAC 4-1-2(4)

6) What is a “hazardous substance”?

Answer

It is any substance designated under 40 CFR 116 pursuant to Section 311 of the Clean Water Act (CWA).

327 IAC 4-1-2(6)

7) What is the definition of a “publicly owned treatment works” or “POTW”?

Answer

It is a treatment works (as defined by Section 212(2) of the CWA) that is owned by the state or a municipality (as defined by Section 502(4) of the CWA). Except that, it does not include any devices, pipes, sewers, or other conveyances not connected to a facility providing treatment. The definition includes any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or compatible industrial wastes. “POTW” also means the municipality (as defined by Section 502(4) of the CWA) including, without limitation, a city, town, county, or other public body created pursuant to state law, that has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

327 IAC 4-1-2(11)

8) What is a “sanitary sewer”?

Answer

It is a sewer that conveys liquid and water-carried wastes from residences, commercial buildings, industrial plants, and institutions; and to which storm, surface, and ground waters are not intentionally allowed to enter.

327 IAC 4-1-2(12)

9) What are “semipublic facilities”?

Answer

They are treatment works as defined by Section 212(2) (33 U.S.C. 1292(2)) of the CWA, 33 U.S.C. 1251, et seq., in effect on November 13, 1991.

- (a) That are not:
 - (1) POTWs;
 - (2) State or federally owned; OR
 - (3) Industrial wastewater treatment plants as defined by 327 IAC 8-12-2(b).
- (b) Semipublic facilities include, but are not limited to, the following:
 - (1) Trailer or mobile home parks;
 - (2) Commercial or shopping centers;
 - (3) Housing developments;
 - (4) Truck stops;
 - (5) Restaurants;
 - (6) Schools;
 - (7) Campgrounds.

327 IAC 4-1-2(13)

10) What is the definition of a “sewer”?

Answer

It is a pipe or conduit that carries wastewater or drainage water.

327 IAC 4-1-2(14)

11) Define a “water pollution treatment/control facility”

Answer

It is any equipment, device, unit, structure, etc., that is used to control, prevent, pretreat, or treat any discharge or threatened discharge of pollutants into any waters of the state of Indiana, including surface and subsurface waters and public or private sewerage systems. The term includes, but is not limited to, the following:

- (a) Treatment facilities.
- (b) Combined sewers.
- (c) Sanitary sewers.
- (d) Lift (pumping) stations.

327 IAC 4-1-2(17)

12) What is the definition of “waters of the state of Indiana” or “waters of the state”?

Answer

The two terms are interchangeable for the following definition. They mean such accumulations of water, surface and underground, natural and artificial, public and private, or parts thereof, that are wholly or partially within, flow through, or border upon this state. The terms do not include any private pond or any off-stream pond, reservoir, or facility built for reduction or control of pollution or cooling of water prior to the discharge unless the discharge causes or threatens to cause water pollution.

327 IAC 4-1-2(18)

13) When may the commissioner impose a sewer connection ban?

Answer

- (a) The commissioner may impose a ban on further sewer connections to the semipublic facility or POTW whenever:
 - (1) Hydraulic or organic overloading of a semipublic facility or POTW exists or is impending; AND
 - (2) The introduction into the semipublic facility or POTW of additional wastewater from new or existing sources is likely to result in the discharge or bypassing of insufficiently treated sewage.
- (b) The sewer connection ban shall prohibit the connection or introduction of additional wastewater or sewage into the semipublic facility or POTW, except as otherwise provided by 327 IAC 4.

327 IAC 4-1-4

14) Whenever, in the determination of the commissioner, a semipublic facility or POTW has reached or is approaching _____ A _____ of its _____ B _____ or _____ C _____, it may be necessary to impose a sewer connection ban if action is not taken by the semipublic facility or POTW to accommodate additional flow or loading.

Answer

- (a) Ninety percent (90%).
- (b) Maximum hydraulic.
- (c) Organic design capacity.

327 IAC 4-1-3

15) What are the requirements when the commissioner notifies a semipublic or POTW that it may be necessary to impose a sewer ban (early warning system) or imposes a sewer ban?

Answer

- (a) Notification shall occur by certified mail, return receipt requested; AND
- (b) Shall be directed to the principal executive officer, ranking elected official, and/or the authorized agent of the semipublic facility or POTW.

327 IAC 4-1-3&5

16) What are the minimum requirements for a request for waiver of a sewer ban?

Answer

It should contain, at a minimum, the projected flow and pollutant loadings from the proposed connection(s) and the projected impact upon the semipublic facility or POTW.

327 IAC 4-1-6(b)

17) A sewer ban for connections from new or existing sources to a semipublic facility or a POTW may be waived under what conditions?

Answer

- (a) The connection will eliminate an existing health hazard and the resulting public health benefit is considered to outweigh the adverse impact of any reduction in the effluent quality from the semipublic or POTW.
- (b) A semipublic facility or POTW expansion project is under construction and will be completed in such time as to accommodate such new conditions.
- (c) An equivalent amount of infiltration or wastewater is removed from the sewage system, thus assuring that the additional wastewater will receive treatment.
- (d) The commissioner is assured that additional water pollution treatment/control facilities (such as chemical feed equipment) will be provided such that the effluent from the semipublic or POTW will not deteriorate beyond its present quality.

- (e) Other assurances are provided that the additional sewage to be discharged into the semipublic facility or POTW shall receive adequate treatment. 327 IAC 4-1-6

18) Under what conditions may the commissioner terminate a sewer connection ban?

Answer

When either of the following exists:

- (a) A demonstrated sewage treatment facility improvement to meet applicable NPDES permit limitations has been completed; OR
(b) It is demonstrated to the satisfaction of the commissioner that an existing hydraulic/organic condition has been or will be discontinued for a continuous period of twelve (12) months from the date additional connections will be made. 327 IAC 4-1-7

19) What type of connection is excluded from a sewer ban?

Answer

- (a) Single-family dwellings built on vacant lots served by an existing sanitary sewer.
(b) Projects that possess a valid construction permit issued under 327 IAC 3-2 prior to the imposition of a sewer connection ban. 327 IAC 4-1-8

20) May a semipublic facility or POTW aggrieved by the imposition of a ban, denial of a sewer ban waiver, or denial of a request to terminate the ban appeal to the board for a hearing?

Answer

Yes – all hearings shall be held in accordance with IC 4-21.5. 327 IAC 4-1-9

21) How may this article (327 IAC 4) be enforced?

Answer

It may be enforced through administrative or judicial proceedings under IC 13-7-11 and the penalty provisions of IC 13-7-13. 327 IAC 4-1-10

22) What shall any person who is, or may reasonably expect to be subjected to, such regulatory provisions do whenever necessary to carry out the provisions of this article (327 IAC 4)?

Answer

- (a) Establish and maintain records;
(b) Make reports;
(c) Install, use, and maintain monitoring equipment or methods;
(d) Sample effluents, or other material; AND
(e) Provide other information;
At the locations, times, and in the manner the commissioner may reasonably prescribe.

327 IAC 4-1-11(a)

23) The commissioner, or the commissioner's authorized representative, upon presentation of proper credentials:

Answer

- (a) Shall have a right of entry to, upon, or through any premises public or private, which records, reports, monitoring equipment or methods, samples, or other information required to be maintained or provided under 327 IAC 4-1-11(a) are located;
(b) May, at reasonable times have access to AND:
(1) Copy any records;
(2) Inspect any equipment or method; OR
(3) Sample any effluent or other material required under 327 IAC 4-1-11(a). 327 IAC 4-1-11(b)

327 IAC ARTICLE 5. (NPDES) Industrial Wastewater Pretreatment Programs

1) "Best Management Practices", or "BMPs", means the following measures to prevent or reduce the pollution of waters of the state:

Answer

- (a) Schedules of activities.
(b) Prohibitions of practice.
(c) Treatment requirements.
(d) Operation and maintenance procedures.
(e) Use of containment facilities.
(f) Other management practices.

327 IAC 5-1.5-6(a)

2) BMPs may be employed to control what types of pollution?

Answer

- (a) Plant site run-off;
 - (b) Spillage or leaks;
 - (c) Sludge or waste disposal; OR
 - (d) Drainage from raw materials storage resulting from manufacturing, commercial, mining or silvicultural activities.
- 327 IAC 5-1.5-6(b)

3) What are “nonpoint source discharges”?

Answer

Nonpoint sources include any discharge of a pollutant that is not a point source, such as the following:

- (a) In-place contaminants.
- (b) Direct wet and dry deposition.
- (c) Ground water inflow.
- (d) Overland run-off.

327 IAC 5-1.5-28

4) What does “NPDES” stand for?

Answer

National Pollutant Discharge Elimination System

327 IAC 5-1.5-34

5) What are “point source discharges”?

Answer

“Point source discharge” means any discernible, confined, and discrete conveyance, including, but not limited to, any of the following from which pollutants are or may be discharged:

- (a) Pipe.
- (b) Ditch.
- (c) Channel.
- (d) Tunnel.
- (e) Conduit.
- (f) Well.
- (g) Discrete fissure.
- (h) Container.
- (i) Rolling stock.
- (j) Concentrated animal feeding operation.
- (k) Landfill leachate collection system.
- (l) Vessel.
- (m) Other floating craft.

(The term does not include return flows from irrigated agriculture or agricultural storm run-off.)

327 IAC 5-1.5-40

6) What does “population equivalent” or “PE” mean?

Answer

“Population equivalent” or “PE” means the calculated population that would contribute a particular amount of biochemical oxygen demand (BOD) per day, using the base of seventeen-hundredths (0.17) pound of five (5) day BOD per capita per day. A different conversion factor may be used in the calculation when approved by the commissioner on the basis of site-specific technical information.

327 IAC 5-1.5-42

7) What is “process wastewater”?

Answer

“Process wastewater is any water that, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw material, intermediate product, finished product, byproduct, or waste product.

327 IAC 5-1.5-46

8) Define “publicly owned treatment works” or “POTW”:

Answer

It is a treatment works (as defined by Section 212(2) of the Clean Water Act) owned by the state or a municipality (as defined by Section 502(4) of the Clean Water Act). Except that, it does not include pipes, sewers, or other conveyances not connected to a facility providing treatment. The term includes any devices and systems used in the storage, treatment, recycling, and reclamation of municipal sewage or compatible industrial wastes. It also includes sewers, pipes, and other conveyances only if they convey wastewater to a POTW treatment plant. The term also

means the municipality (as defined by Section 502(4) of the Clean Water Act) that has jurisdiction over the indirect discharges to and the discharges from such a treatment works. 327 IAC 5-1.5-48

9) What is a “schedule of compliance”?

Answer

It is a schedule of remedial measures, including an enforceable sequence of actions or operations, including construction, leading to compliance with an effluent limitation, other limitation, prohibition, standard, or another permit condition. 327 IAC 5-1.5-55

10) Define “total maximum daily load” or “TMDL”:

Answer

“TMDL” is the sum of the individual wasteload allocations for point sources and load allocations for nonpoint sources and natural background minus the sum of a specified margin of safety and any capacity reserved for growth. If a receiving water has only one (1) point source discharger, the TMDL is the sum of that point source WLA (waste load allocation) plus the LAs (load allocation) for any nonpoint sources of pollution and natural background sources, tributaries, or adjacent segments minus the sum of a specified margin of safety and any capacity reserved for growth. TMDLs can be expressed in terms of either mass per time, toxicity, or other appropriate measure. If best management practices (BMPs) or other nonpoint source pollution controls make more stringent load allocations practicable, then wasteload allocations may be made less stringent. Thus, the TMDL process provides for nonpoint source control tradeoffs. A TMDL sets and allocates the maximum amount of a pollutant that may be introduced into a waterbody and still assure attainment and maintenance of water quality standards. 327 IAC 5-1.5-66

11) What is a “water pollution treatment or control facility”?

Answer

It is any equipment, device, unit, or structure that is used to control, prevent, pretreat, or treat any discharge or threatened discharge of pollutants into any waters of Indiana, including surface and subsurface waters and public or private sewerage systems. The term includes, but is not limited to, the following:

- (a) Treatment facilities.
- (b) Combined sewers.
- (c) Sanitary sewers.
- (d) Disposal well systems.
- (e) Animal feeding operation treatment facilities.
- (f) Land application treatment facilities.
- (g) Cyanide isolation facilities.

327 IAC 5-1.5-71

12) Who is required to have an NPDES permit?

Answer

Any discharge of pollutants into waters of the state as a point source discharge, except for exclusions made in 327 IAC 5-2-4, is prohibited unless in conformity with a valid NPDES permit obtained prior to the discharge. (Note: Discharges exempted from requiring an NPDES permit may be subject to permits or approvals under other laws.)

327 IAC 5-2-2

13) Which POTWs are required to provide the results of valid whole effluent biological toxicity testing to the commissioner?

Answer

- (a) All POTWs with design influent flows equal to or greater than one million (1,000,000) gallons per day.
- (b) All POTWs with approved pretreatment programs or POTWs required to develop a pretreatment program.

In addition to the POTWs listed in the subsection above, the commissioner may require other POTWs to submit the results of toxicity tests with their permit applications, based on consideration of the following factors:

- (a) The variability of the pollutants or pollutant parameters in the POTW effluent (based on chemical-specific information, the type of industrial contributors).
- (b) The dilution of the effluent in the receiving water (ratio of effluent flow to receiving stream flow).
- (c) Existing controls on point or nonpoint sources, including total maximum daily load calculations for the waterbody segment and the relative contribution of the POTW.
- (d) Receiving stream characteristics, including possible or known water quality impairment, and whether the POTW discharges to one (1) of the Great Lakes, or a water designated as an outstanding natural resource.

- (e) Other considerations (including, but not limited to, the history of toxic impact and compliance problems at the POTW), which the commissioner determines could cause or contribute to adverse water quality impacts.

327 IAC 5-2-3(g) & (h)

14) Who is responsible for submitting an application for an NPDES permit?

Answer

The owner of the facility or operation from which a discharge of pollutants occurs is responsible for applying for and obtaining a permit, except where the facility or operation is operated by a person other than an employee of the owner. In which case, it is the operator's duty to apply for and obtain a permit.

327 IAC 5-2-3(c)

15) What are some of the items included in an NPDES permit?

Answer

- (a) Name and location of permittee.
- (b) Issuance, effective and expiration dates.
- (c) Facility description.
- (d) Effluent limitations.
- (e) Monitoring requirements.
- (f) Management requirements.
- (g) Permittee's responsibilities.

327 IAC 5-2-3

16) What is the maximum term of a NPDES permit?

Answer

A permit shall be issued for a fixed term not to exceed five (5) years. Permits of less than five (5) years duration may be issued in appropriate circumstances at the discretion of the commissioner. A permit may be modified, revoked and reissued, or terminated prior to the expiration of the term for cause, as specified in 327 IAC 5-2-16, or in accordance with conditions set forth in the permit (as in a reopening clause). In no event may the term of a permit be extended beyond five (5) years from its original effective date by modification, extension, or other means, except as provided in 327 IAC 5-2-6(b).

327 IAC 5-2-6(a)

17) May a permit be transferred by the permittee to a new owner or operator?

Answer

A permit may be transferred to another person by a permittee, without modification or revocation and reissuance being required, if the following occurs:

- (a) The current permittee notifies the commissioner at least thirty (30) days in advance of the proposed transfer date in (b).
- (b) A written agreement containing a specific date for transfer of permit responsibility and coverage between the current permittee and the transferee (including acknowledgement that the existing permittee is liable for violations up to that date) is submitted to the commissioner.
- (c) The transferee certifies in writing to the commissioner intent to operate the facility without making such material and substantial alterations or additions to the facility as would significantly change the nature or quantities of pollutants discharged and thus constitute cause for permit modification under section (d) of this rule. However, the commissioner may allow a temporary transfer of the facility's treatment system prior to making alterations, despite the transferee's intent to make such material and substantial alterations or additions to the facility.
- (d) The commissioner, within thirty (30) days, does not notify the current permittee and the transferee of the intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

(Note: Modifications to a wastewater facility may require a construction permit).

327 IAC 5-2-6(c)

18) What are the rights that the commissioner, or the commissioner's representative, has to enter a facility?

Answer

The permittee shall allow the commissioner, or an authorized representative (including an authorized contractor acting as a representative of the commissioner), upon the presentation of credentials and such other documents as may be required by law:

- (a) To enter upon the permittee's premises where a point source is located or where any records must be kept under the terms and conditions of the permit;
- (b) To have access to and copy at reasonable times any records that must be kept under the terms and conditions of the permit;
- (c) To inspect, at reasonable times:
 - (1) Any monitoring equipment or method;

- (2) Any collection, treatment, pollution management, or discharge facilities;
- (3) Practices required or otherwise regulated under the permit; AND
- (d) To sample or monitor, at reasonable times, any discharge of pollutants or internal wastestream (where necessary to ascertain the nature of a discharge of pollutants) for the purpose of evaluating compliance with the permit or as otherwise authorized. 327 IAC 5-2-8(7)

19) What are some NPDES permit reporting requirements?

Answer

- (a) Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.
- (b) The permittee shall give advance notice to the commissioner of any planned changes in the permitted facility, any activity, or other circumstances that the permittee has reason to believe may result in noncompliance with permit requirements.
- (c) The permittee shall orally report information on any of the following types of noncompliance within twenty-four (24) hours from the time the permittee becomes aware of such noncompliance:
 - (1) Any unanticipated bypass that exceeds any effluent limitation in the permit.
 - (2) Violation of a maximum daily discharge limitation for any of the pollutants listed by the commissioner in the permit to be reported within twenty-four (24) hours.
 - (3) Any noncompliance that may pose a significant danger to human health or the environment. Reports under this item shall be made as soon as the permittee becomes aware of the noncomplying circumstances to the emergency response telephone numbers specified in 327 IAC 2-6-2.
 - (4) Any upset that exceeds any effluent limitation in the permit. 327 IAC 5-2-8(10)

20) What are the requirements for bypass?

Answer

- (a) The following definitions apply:
 - (1) "Bypass" means the intentional diversion of a waste stream from any portion of a treatment facility.
 - (2) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities that would cause them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- (b) The permittee may allow any bypass to occur that does not exceed any effluent limitations contained in the NPDES permit, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to clauses (c) and (d).
- (c) The permittee must provide the commissioner with the following notice:
 - (1) If the permittee knows or should have known in advance of the need for a bypass (anticipated bypass), it shall submit prior written notice. If possible, such notice shall be provided at least ten (10) days before the date of the bypass for approval by the commissioner.
 - (2) The permittee shall submit notice of an unanticipated bypass as required by subdivision 327 IAC 5-2-8(10)(C).
- (d) The following provisions are applicable to bypasses:
 - (1) Bypass is prohibited, and the commissioner may take enforcement action against a permittee for bypass unless the following occur:
 - (A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.
 - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment down time. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass that occurred during normal periods of equipment down time or preventive maintenance.
 - (C) The permittee submitted notices as required under clause (c).
 - (2) The commissioner may approve an anticipated bypass, after considering its adverse effects if the commissioner determines that the anticipated bypass will meet the three (3) conditions listed in item (i). The commissioner may impose any conditions determined to be necessary to minimize any adverse effects. 327 IAC 5-2-8(11)

21) What are the requirements for upset?

Answer

- (a) "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed

treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

- (b) An upset shall constitute an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of clause (c) are met.
- (c) A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, that:
 - (1) An upset occurred and the permittee has identified the specific cause of the upset, if possible;
 - (2) The permitted facility was at the time being operated in compliance with proper operation and maintenance procedures;
 - (3) The permittee complied with any remedial measures required under 327 IAC 5-2-3; AND
 - (4) The permittee submitted notice of the upset as required in subdivision 327 IAC 5-2-8(10)(C).

327 IAC 5-2-8(12)

22) Is it acceptable to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit?

Answer

No, it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.

327 IAC 5-2-8(13)

23) What are possible penalties for noncompliance with NPDES permit reporting requirements?

Answer

All applications, reports, or other information submitted to the commissioner shall be signed and certified as defined under section 327 IAC 5-2-22 of this rule. Any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under the NPDES permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than ten thousand dollars (\$10,000) per violation, or by imprisonment for not more than one hundred eighty (180) days per violation, or by both.

327 IAC 5-2-8(14)

24) What is the “average monthly discharge”?

Answer

It is the total mass or flow-weighted concentration of all daily discharges sampled or measured during a calendar month on which daily discharges are sampled and measured, divided by the number of daily discharge samples and/or measured during such month. The average monthly discharge limitation is the highest allowable average monthly discharge for any calendar month.

327 IAC 5-2-11(a)(1)

25) What is the “average weekly discharge”?

Answer

It is the total mass or flow-weighted concentration of all daily discharges during any calendar week on which daily discharges are sampled or measured, divided by the number of daily discharges sampled and/or measured during such calendar week. The average weekly discharge limitation is the maximum allowable average weekly discharge for any calendar week.

327 IAC 5-2-11(a)(2)

26) What is a “continuous discharge”?

Answer

It is a discharge that occurs without interruption, except for infrequent shutdowns for maintenance, process changes, or other similar activities, throughout the operating hours of the facility.

327 IAC 5-2-11(a)(3)

27) What is a “daily discharge”?

Answer

It is the total mass of a pollutant discharged during the calendar day. Or, in the case of a pollutant limited in terms other than mass pursuant to 327 IAC 5-2-11(e), the average concentration or other measurement of the pollutant specified over the calendar day or any twenty-four (24) hour period that reasonably represents the calendar day for the purposes of sampling. The maximum daily discharge limitation is the maximum allowable daily discharge for any calendar day.

327 IAC 5-2-11(a)(4)

28) How shall the average of discharge data be determined?

Answer

- (a) For fecal coliform, the average monthly discharge and average weekly discharge, as concentrations, shall be calculated using a geometric mean.
- (b) For E. coli, the average monthly discharge, as a concentration, shall be calculated using a geometric mean.

- (c) For all other parameters, calculations that require averaging of sample analyses or measurements of daily discharges shall use an arithmetic mean unless otherwise specified or approved by the commissioner.

327 IAC 5-2-11(a)(5)

29) What are some of the requirements for production-based limitations?

Answer

- (a) For dischargers other than POTWs, permit effluent limitations which are based on production rates (or another measure of operation) shall be calculated on the basis of a reasonable measure of the actual production of the facility.
- (b) A discharger whose permit limitations are determined through a waste load allocation procedure to maintain water quality above applicable standards may request the commissioner to calculate the discharger's load allocation, relative to the load allocations of other dischargers, on the basis of the design production capacity of the discharger's facility.
- (c) In the case of POTW's, permit limitations shall be calculated based on design flow unless good cause exists for utilizing a different basis.
- (d) For continuous dischargers, all interim and final permit effluent limitations, including those necessary to achieve water quality standards, shall be stated, unless impracticable, as maximum daily and average monthly discharge limitations for all dischargers. Except that, for POTWs average weekly and average monthly discharge limitations shall be used for BOD5, TSS, and ammonia nitrogen. For discharges within the Great Lakes system, limitations for ammonia shall be stated as maximum daily and average monthly discharge limitations for all dischargers.

327 IAC 5-2-11(c)

30) Have different water quality-based effluent limitations (WQBELs) been established for Great Lakes dischargers and those not discharging to the Great Lakes?

Answer

Yes, water quality-based effluent limitations for dischargers not discharging to waters within the Great Lakes system and Great Lakes dischargers may differ and can be found in 327 IAC 5-2-11 and 12.

327 IAC 5-2-11&12

31) To assure compliance with permit terms and conditions, what are some of the monitoring requirements for all permittees, as required by their permit?

Answer

- (a) The mass, concentration, or other measurement specified in 327 IAC 5-2-11, 11.1, and 11.6 for each pollutant specified in the permit.
- (b) The volume of wastewater flow at monitoring points specified in the permit, including the final effluent flow from each point source.
- (c) Other parameters and conditions as specifically required in the permit.
- (d) A POTW shall monitor the mass, concentration, or other units of specified pollutants in the raw influent, in the discharge from intermediate unit treatment processes as specified in the permit or the applicable report of operation form, and in the final effluent, and the volume of effluent flow.

327 IAC 5-2-13(a)

32) Any permittee, who is required to monitor under 327 IAC 5-2-13, shall maintain what records?

Answer

The permittee must maintain all monitoring information and monitoring activity records including:

- (a) The date, exact place and time of sampling or measurements;
- (b) The person(s) who performed the sampling or measurements;
- (c) The date(s) analyses were performed;
- (d) The person(s) who performed the analyses;
- (e) The analytical techniques or methods used; AND
- (f) The results of such measurements and analyses.

327 IAC 5-2-14(a)

33) How long must all records of monitoring activities and results be maintained?

Answer

All records of monitoring activities and results (including all original strip chart recordings for continuous monitoring instrumentation and calibration and maintenance records) shall be retained by the permittee for three (3) years. The three-year period shall be extended:

- (a) Automatically during the course of any unresolved litigation regarding the discharge of pollutants by the permittee or regarding promulgated effluent guidelines applicable to the permittee; OR
- (b) As requested by the commissioner.

327 IAC 5-2-14(b)

34) What are some of the reporting requirements for the discharge monitoring report (DMR)?

Answer

Permittees shall report to the commissioner, using discharge monitoring reports (DMR) (EPA Form 3320-1). And in the case of POTWs, semipublic, state, and federal facilities' reports of operation, the results of any monitoring specified by the permit, pursuant to 327 IAC 5-2-13 of this rule, as often as required by the permit, but in no case less than once per year. POTWs with pretreatment or hybrid pretreatment requirements in their NPDES permits as well as industrial dischargers shall also submit the results of effluent analysis on the Indiana Discharge Monitoring Report Form 30530. 327 IAC 5-2-15(a)

35) If the permittee monitors any pollutant more frequently than required by the permit, using approved analytical methods, do the results of this monitoring have to be reported in the DMR?

Answer

Yes, if the permittee monitors any pollutant more frequently than required by the permit, using approved analytical methods, the results of this monitoring shall be reported in the DMR. Other monitoring data not specifically required in the permit (such as internal process or internal waste stream data) that is collected by or for the permittee need not be submitted unless requested by the commissioner. Any such additional monitoring data that indicates a violation of a permit limitation shall be followed up by the permittee, whenever feasible, with a monitoring sample obtained and analyzed pursuant to approved analytical methods. The results of the analysis of the follow-up sample shall be reported to the commissioner in the permittee's DMR. 327 IAC 5-2-15(b)

36) Does a certified operator have to prepare or direct the preparation of reports?

Answer

Yes, all reports required by 327 IAC 5-2-15 shall be prepared by or under the direction of a certified wastewater treatment plant operator licensed under the provisions of 327 IAC 5-22 when such reports concern a discharge originating in whole or in part from a wastewater treatment plant or a water treatment plant, respectively, as defined in IC 13-11-2. 327 IAC 5-2-15(c)

37) What types of permit modifications, shall NOT require public notice and an opportunity for hearing under 327 IAC 5-3 unless they would render the applicable standards and limitations in the permit less stringent, or unless contested by the permittee?

Answer

- (a) Correction of typographical errors.
- (b) A change requiring more frequent monitoring or reporting by the permittee.
- (c) A change in an interim compliance date, but not more than one hundred twenty (120) days beyond the date previously established and not where the change would interfere with the attainment of a final compliance date.
- (d) A change in ownership or control of a source that has a permit where no other change in the permit is necessary and where transfer is accomplished under 327 IAC 5-2-6(c).
- (e) A change in the construction schedule for a discharger that is a new source. No such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge under 327 IAC 5-2-17.
- (f) Deletion of a point source outfall, where the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.

327 IAC 5-2-16(e)

38) What NPDES information does the public have access to?

Answer

- (a) All:
 - (1) Permit applications;
 - (2) Effluent data;
 - (3) Certifications issued under section 401 of the CWA;
 - (4) Public comments (including comments of all governmental agencies) submitted under 327 IAC 5-3-9 on a draft permit;
 - (5) General correspondence;
 - (6) Permits (drafts and final);
 - (7) Statements of basis (briefing memos); AND
 - (8) Fact sheets;Shall be available to the public for inspection and copying at a reasonable charge without restriction.
- (b) Public access to other information submitted to the commissioner under the NPDES program, under a claim of confidentiality, shall be governed by 327 IAC 12.1.

327 IAC 5-2-18

39) A violation subject to enforcement includes, but is not limited to:

Answer

- (a) The discharge of pollutants without an NPDES permit or in violation of any effluent limitation in an NPDES permit;
- (b) The violation of any other term or condition of an NPDES permit;
- (c) Failure to comply with NPDES application requirements under 327 IAC 5-3 or 327 IAC 5-2-3; OR
- (d) Failure to allow entry, inspection, and monitoring by the commissioner when requested in accordance with applicable law or to carry out monitoring, recording, and reporting required under 327 IAC 5.

327 IAC 5-2-20

40) What are the requirements for signing permit applications?

Answer

- (a) All permit applications shall be signed as follows:
 - (1) The following for a corporation by a responsible corporate officer:
 - (A) For purposes of this section, a “responsible corporate officer” means either of the following:
 - (i) A president, secretary, treasurer, any vice president of the corporation in charge of a principal business function, or any other person who performs similar policymaking or decision making functions for the corporation.
 - (ii) The manager of one (1) or more manufacturing, production, or operating facilities employing more than two hundred fifty (250) persons or having gross annual sales or expenditures exceeding twenty-five million dollars (\$25,000,000) (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - (B) For purposes of this section, a principal executive officer of a federal agency includes the following:
 - (i) The chief executive officer of the agency.
 - (ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
 - (2) For a partnership or sole proprietorship by a general partner or the proprietor, respectively.
 - (3) For a municipality, state, federal, or other public agency or political subdivision thereof by either a principal executive officer or ranking elected official.
- (b) All reports required by permits and other information requested by the commissioner shall be signed by a person described in subsection (a), or by a duly authorized representative of that person. A person is a duly authorized representative only if the authorization meets the following requirements:
 - (1) The authorization is made in writing by a person described in subsection (a).
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.).
 - (3) The written authorization is submitted to the commissioner.
- (c) If an authorization under subsection (b) is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of subsection (b) must be submitted to the commissioner prior to or together with any reports, information, or applications to be signed by an authorized representative.

327 IAC 5-2-22(a),(b)&(c)

41) How must any person signing a document under 327 IAC 5-2-22(a) or (b) certify the document?

Answer

They shall make the following certification:

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

327 IAC 5-2-22(d)

42) The existing NPDES permit will expire soon. When should the permittee submit a new application for an NPDES permit?

Answer

An NPDES permit application must be submitted at least one hundred eighty days (180) prior to the expiration date of the existing permit, unless the commissioner allows a later date.

327 IAC 5-3-2(a)(2)

43) What is the public comment period for a draft NPDES permit?

Answer

- (a) A comment period of at least thirty (30) days following the date of public notice of the formulation of a draft permit shall be provided. During this period any interested persons may submit written comments on the draft permit and request a public hearing in accordance with 327 IAC 5-3-9(b). All comments, including those submitted in public hearing, shall be considered by the commissioner in preparing the final permit and shall be responded to as provided in 327 IAC 5-3-15.
 - (b) If any information or arguments submitted during the public comment period appears to raise substantial new questions concerning a permit, the commissioner may conclude that one or more of the following actions is necessary for an informed decision:
 - (1) Formulation of a new draft permit, appropriately modified;
 - (2) Preparation of a fact sheet or revised fact sheet and reopening of the comment period under 327 IAC 5-3-9; OR
 - (3) Reopening or extending the comment period to give interested persons an opportunity to comment on the information or arguments submitted. In each case the notice required by 327 IAC 5-3-12 shall be given.
- 327 IAC 5-3-9&11

44) In relation to NPDES permits, what is a “public notice”?

Answer

Notice of every proposed determination on a permit issuance or denial and of a public hearing concerning such a proposed determination shall be circulated in a manner designed to inform interested persons. Notice of a proposed permit determination shall allow at least thirty (30) days for public comment, as specified in 327 IAC 5-3-9, and notice of a public hearing shall be given at least thirty (30) days before the hearing.

327 IAC 5-3-12

45) How does a permit become effective?

Answer

- (a) For the purpose of this section, a “final permit decision” means a final decision to issue, deny, modify, revoke and reissue.
- (b) Issuance of a general permit shall be accomplished by the publication of the full text of the permit in the *Indiana Register* and the notification specified under 327 IAC 5-3-12(d), in addition to the notification required by 327 IAC 5-3-14(a)
- (c) A final permit decision shall become effective with respect to the applicant unless, within fifteen (15) days after receipt of notice of said decision, the applicant files a request for adjudicatory hearing concerning the permit decision with the commissioner in accordance with IC 13-7-10-2.5(c) and IC 4-21.5-3-7

327 IAC 5-3-14(a),(b)&(d)

46) If you disagree with an action the agency takes, is there anything you can do?

Answer

Yes, any person aggrieved by a final agency action on an adjudicatory hearing or affirming the denial of a request for adjudicatory hearing may seek judicial review of said action pursuant to the provisions of IC 4-21.5-5.
(Note: There are strict time limitations.)

327 IAC 5-3-16

47) Are concentrated animal feeding operations required to obtain an NPDES permit?

Answer

Yes, they are point source discharges subject to the NPDES permit program.

327 IAC 5-4-3(a)

48) What is an “animal feeding operation”

Answer

It is a lot or facility where the following conditions are met:

- (a) Animals (other than aquatic animals) have been, or will be, stabled or confined and fed or maintained for a total of forty-five (45) days or more in any 12-month period; AND
- (b) Crops, vegetation, forage growth or post-harvest residues are not sustained in the normal growing season over any portion of the lot or facility.

Two (2) or more animal feeding operations under common ownership are considered, for the purposes of 327 IAC 5 to be a single animal feeding operation if they adjoin each other or if they use a common area or system for the disposal of wastes.

327 IAC 5-4-3(b)(1)

49) What factors does the commissioner consider when determining if an animal feeding operation is designated as a concentrated animal feeding operation where it is determined to be a significant contributor of pollution to the waters of the state?

Answer

- (a) The size of the animal feeding operation and the amount of wastes reaching waters of the state;
- (b) The location of the animal feeding operation relative to waters of the state;
- (c) The means of conveyance of animal wastes and process wastewaters into waters of the state;
- (d) The slope, vegetation, rainfall, and other factors affecting the likelihood or frequency of discharge or animal wastes and process wastewaters into waters of the state; AND,
- (e) Other factors relevant to the significance of the pollution problem under consideration.

327 IAC 5-4-3(c)

50) What storm water discharges are subject to the NPDES program?

Answer

- (a) The following discharges consisting entirely of storm water are subject to the NPDES program:
 - (1) A discharge with respect to which a permit has been issued prior to February 4, 1987.
 - (2) A discharge that the commissioner determines contributes to a violation of a water quality standard or a significant contributor of pollutants to waters of the state.
- (b) Prior to October 1, 1992, a permit shall not be required for a discharge composed entirely of storm water, except the following:
 - (1) A discharge with respect to which a permit has been issued prior to February 4, 1987.
 - (2) A discharge associated with industrial activity.
 - (3) A discharge from a large municipal separate storm sewer system serving a population of two hundred fifty thousand (250,000) or more.
 - (4) A discharge from a medium municipal separate storm sewer system serving a population of one hundred thousand (100,000) or more but less than two hundred fifty thousand (250,000).
 - (5) A discharge that the commissioner determines contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the state.

327 IAC 5-4-6(a)&(b)

51) What are technology-based treatment requirements?

Answer

They are requirements under sections 301 (b) and 306 of the CWA and represent the minimum level of control that must be imposed in an NPDES permit issued under section 402 of the CWA for an existing source and a new source, respectively.

327 IAC 5-5-2(a)

52) What are the requirements for BPT (Best Practicable Technology)?

Answer

- (a) The total cost of application of technology in relation to the effluent reduction benefits to be achieved from such application.
- (b) The age of equipment and facilities involved.
- (c) The process employed.
- (d) The engineering aspects of the application of various types of control techniques.
- (e) Process changes.
- (f) Nonwater quality environmental impact, including energy requirements.

327 IAC 5-5-2(h)(1)

53) What are the requirements for BCT (Best Conventional Technology)?

Answer

- (a) The reasonableness of the relationship between costs of attaining a reduction in effluent and the effluent reduction benefits derived.
- (b) The comparison of the cost and level of reduction of such pollutants from the discharge from publicly owned treatment works to the cost and level of reduction of such pollutants from a class or category of industrial sources.
- (c) The age of the equipment and facilities involved.
- (d) The process employed.
- (e) The engineering aspects of the application of various types of control techniques.
- (f) Process changes.
- (g) Nonwater quality environmental impact, including energy requirements.

327 IAC 5-5-2(h)(2)

54) What are the requirements for BAT (Best Available Technology)?

Answer

- (a) The age of the equipment and facilities involved.
- (b) The process employed.
- (c) The engineering aspects of the application of various types of control techniques.

- (d) Process changes.
- (e) The cost of achieving such effluent reduction.
- (f) Nonwater quality environmental impact, including energy requirements. 327 IAC 5-5-2(h)(3)

55) For the purpose of alternative thermal effluent limitations, a “representative important species” is:

Answer

It is a species that is representative, in terms of its biological needs, of a balanced, indigenous community of shellfish, fish and wildlife in the body of water into which a discharge of heat is made. 327 IAC 5-7-2

56) Who do Best Management Practices (BMPs) apply to?

Answer

Dischargers who use, manufacture, store, handle, or discharge any pollutant listed as toxic under section 307(a)(1) of the CWA, any pollutant listed as hazardous under section 311 of the CWA, or on a case-by-case basis, other materials that may cause pollution if they are discharged are subject to the requirements of this rule for all activities that may result in significant amounts of those pollutants reaching waters of the state. These activities are ancillary manufacturing operations including the following:

- (a) Materials storage areas.
- (b) In-plant transfer.
- (c) Process and material handling areas.
- (d) Loading and unloading operations.
- (e) Plant site runoff.
- (f) Sludge and waste disposal areas 327 IAC 5-9-2(a)

57) Define “manufacture” as it applies to Best Management Practices (BMPs).

Answer

It means to produce as an intermediate or final product or byproduct. 327 IAC 5-9-2(b)

58) Other requirements of a BMP (Best Management Practices) program include:

Answer

- (a) It may reflect requirements for Spill Prevention Control Countermeasure (SPCC) plans under section 311 of the CWA and may incorporate any part of such plans into the BMP program by reference;
- (b) Shall assure the proper management of solid and hazardous waste in accordance with regulations promulgated under the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (RCRA) (40 U.S.C. 6901 et seq.). Management practices required under RCRA regulations shall be expressly incorporated into the BMP program; AND,
- (c) Shall address the following points for the ancillary activities:
 - (1) Statement of policy.
 - (2) Spill control committee.
 - (3) Material inventory.
 - (4) Material compatibility.
 - (5) Employee training.
 - (6) Reporting and notification procedures.
 - (7) Visual inspections.
 - (8) Preventive maintenance.
 - (9) Housekeeping.
 - (10) Security 327 IAC 5-9-2(e)

59) When are phosphorus removal or control facilities required for a point source discharge?

Answer

- (a) The daily discharge, as a monthly average, contains ten (10) pounds or more of total phosphorus (calculated as elemental phosphorus – “P”) AND
- (b) The discharge is located within the Lake Michigan or Lake Erie Basins; OR
- (c) The discharge directly enters a lake or reservoir or enters a tributary within forty (40) miles upstream of a lake or reservoir. 327 IAC 5-10-2(a)

60) When is disinfection required?

Answer

- (a) Disinfection is required of all sanitary discharges for the annual period of April 1 through October 31 except multicelled waste stabilization ponds that are adequately designed and operated and are not either hydraulically or organically overloaded and as provided in 327 IAC 5-10-3(b) & 4(d).

- (b) Disinfection is not required and is not expected to be practiced during the annual period of November 1 through March 31, except as necessary to comply with ORSANCO requirements (for discharges directly into the Ohio River). In cases where chlorination must be practiced during this period (such as to maintain sand filters), the maximum effluent limitation for chlorine and monitoring requirements for such remain in effect.

327 IAC 5-10-6(a) & (b)

61) What are the requirements for facilities using chlorine or other halogenated compounds as a disinfectant?

Answer

- (a) For those sanitary dischargers designated as minor facilities (generally those with a population equivalent (PE) of less than ten thousand (10,000)), the residual chlorine concentration after disinfection (but prior to dechlorination) is to be maintained at a minimum of five-tenths (0.5) milligram per liter.
- (b) For those sanitary dischargers designated as major facilities (those with a PE of ten thousand (10,000) or greater), no minimum residual chlorine limitation is applied, so long as the final effluent complies with bacteriological standards based on 327 IAC 2-1-6 or 327 IAC 2-1.5-8.
- (c) For all sanitary discharges using chlorine or bromine compounds as a disinfectant or for filter or other equipment maintenance at any time, dechlorination is to be practiced such that the concentration of total residual chlorine (TRC), or where bromine is used TRO, in the final effluent does not exceed water quality-based effluent limitations. If these water quality-based limitations are below the LOQ, compliance with such limitations will be determined using the applicable procedures contained under 327 IAC 5-2-11.1 or 327 IAC 5-2-11.6.

327 IAC 5-10-6(c)

62) If a facility uses a disinfectant other than chlorine or other halogen compounds, what are the E. coli requirements?

Answer

Facilities using a disinfectant other than chlorine or other halogen compounds may not contain E. coli in excess of one hundred twenty-five (125) per one hundred (100) milliliters as a geometric mean or two hundred thirty-five (235) per one hundred (100) milliliters maximum during the disinfection season.

327 IAC 5-10-6(d)

63) When may the commissioner order facilities to connect to and/or receive and treat sewage?

Answer

- (a) If the commissioner finds it is in the interest of the health, safety, convenience, and welfare of the residents of any area, any person, publicly or semipublicly owned sewage treatment systems may be ordered to connect to and/or receive and treat sewage from any other person or from an industry, shopping center, mobile home park, school, or housing development when such service and use will not result in irreparable injury to the receiving equipment or make impossible the rendering of the service previously rendered to the users of such equipment. The persons involved shall negotiate the terms for such connection and service, in accordance with the terms of IC 13-7-15-1.
- (b) Any new school, mobile home park, motel, motor court, or motor hotel shall dispose of sewage through the use of a public sewerage system if the sewerage system is available within a reasonable distance from the facility.
- (c) Any existing school, mobile home park, motel, motor court, or motor hotel with a direct discharge of sewage, as authorized by an NPDES permit shall connect to a public sewerage system, discontinue the direct discharge, and abandon their wastewater treatment plant if a public sewerage system becomes available at any time within a reasonable distance from the facility. In this instance, "reasonable distance" is related to cost. The intent of this provision is to encourage the entities mentioned in this section to compare the cost of connecting to a sewerage system against the cost to build or upgrade and operate a sewage treatment plant.

327 IAC 5-10-7(a),(b)&(c)

327 IAC ARTICLE 5. Rules 16 through 21. State Pretreatment Program

1) The pretreatment rules establish a state program to control the discharge of industrial pollutants into publicly owned treatment works (POTWs). What are the objectives of the state pretreatment program?

Answer

- (a) To prevent the introduction of pollutants into a POTW that will interfere with the operation of a POTW, including interference with the use or disposal of municipal sludge.
- (b) To prevent the introduction of pollutants into a POTW that will pass through the treatment works without receiving effective treatment or otherwise be incompatible with such works.
- (c) To improve opportunities to recycle and reclaim municipal and industrial wastewaters and sludges.

327 IAC 5-16-1(b)

2) Who does the pretreatment rule apply to?

Answer

- (a) New or existing industries that discharge by direct connection or indirectly by truck, rail, or other means, nondomestic wastes into POTWs; and
- (b) POTWs that receive or may receive discharges of nondomestic wastes from those industries.

327 IAC 5-16-1(c)

3) What information is available for public inspection and copying without restriction during normal hours of operation?
(A copy fee may be assessed in accordance with the uniform copying fee authorized under IC 5-14-3-8(c))

Answer

- (a) Applications for IWP permits.
- (b) Permits (draft and final).
- (c) Statements of basis.
- (d) Effluent data from industrial users.
- (e) Submissions from POTWs transmitted to the department under this article.
- (f) Public comments on requests for POTW pretreatment program approval or for authority to revise discharge limits for pollutants consistently removed by the POTW.
- (g) Public access to other information, including information submitted to the department under claim of confidentiality, shall be governed by 327 IAC 12.1.

327 IAC 5-16-3

4) A violation of pretreatment rules may:

Answer

- (a) Subject a person causing or contributing to the violation to administrative or judicial enforcement proceedings, under IC 13-30-3, and the penalties provided under IC 13-30-4;
- (b) Be cause for modification; revocation and reissuance; or termination of an industrial waste pretreatment permit or an NPDES permit; AND
- (c) Warrant the invocation of emergency procedures under IC 13-14-10.

327 IAC 5-16-4(a)

5) Is the operator required to allow representatives of the commissioner:

- (a) Entry, inspection, and monitoring by representatives of the commissioner when requested in accordance with applicable law; or
- (b) To carry out monitoring, recording, and reporting required under article 327 IAC 5-16-4?

Answer

Yes, failure to allow the above access to representatives of the commissioner constitutes a violation of the pretreatment permit.

327 IAC 5-16-4(d)

6) All POTWs and industrial users shall comply with the applicable reporting requirements of 40 CFR 403.12 and 327 IAC 5-21-10. Additionally, reporting of spills into a POTW or of upsets in pretreatment facilities may be required of an industrial user by its control authority. Reports must be signed by?

Answer

- (a) A responsible corporate officer (as defined by 327 IAC 5-16-5(b)(1)).
- (b) A general partner or proprietor or manager if the industrial user submitting the reports is a partnership or sole proprietorship, respectively.
- (c) A duly authorized representative of the individual designated in either subdivision (a) or (b) above if:
 - (1) The authorization is made in writing by the individual described in either subdivision (a) or (b) above;
 - (2) The authorization specifies either an individual or a position having responsibility for the overall operation of the facility from which the industrial discharge originates, such as the position of plant manager, operator of a well, or well field superintendent, or a position of equivalent responsibility, or having overall responsibility for environmental matters for the company; AND
 - (3) The written authorization is submitted to the control authority.

327 IAC 5-16-5(a)&(b)

7) What type of access to records must an industrial user allow and how long must that industrial user maintain the records required under 327 IAC 5-16-5(c)?

Answer

These records must be made available for inspection and copying, upon request, to the commissioner, the regional administrator, and the POTW to which the industrial user discharges its wastewater for three years. The period of retention may be extended during the course of any unresolved litigation regarding the discharge of pollutants by the industrial user, the operation of the approved POTW pretreatment, or when requested by the commissioner or the regional administrator. Records of monitoring activities must also be maintained (in accordance with 327 IAC 5-2-14)

327 IAC 5-16-5(c)&(d)

- 8) Reports that relate to the actual operation of or discharge from a pretreatment facility must be prepared by or under the direction of _____ ?

Answer

A wastewater treatment plant operator certified under IC 13-18-11.

327 IAC 5-16-5(e)

- 9) Who must sign reports required by a POTW?

Answer

A responsible corporate officer, ranking elected official, or other duly authorized employee must sign these reports (if that employee is responsible for the overall operation of the POTW). A copy of the written authorization designating the employee must be submitted to the commissioner.

327 IAC 5-16-5(f)

- 10) As used in 327 IAC 5-16-6, an “upset” means an exceptional incident in which there is unintentional and temporary noncompliance with any pretreatment standards or requirements in 327 IAC 5-2 because of factors beyond the reasonable control of the industrial user. What does NOT constitute an upset?

Answer

- (a) Noncompliance to the extent caused by operational error;
- (b) Improperly designed treatment facilities;
- (c) Inadequate treatment facilities;
- (d) Lack of preventive maintenance; OR
- (e) Careless or improper operation .

327 IAC 5-16-6(a)

- 11) A “bypass” means the intentional diversion of waste streams from any portion of an industrial user’s treatment facility. When may an industrial user allow a bypass to occur?

Answer

- (a) When it does not cause a violation of any pretreatment standard or requirement under 327 IAC 5-2; AND
- (b) When it is for essential maintenance to assure efficient operation.

327 IAC 5-16-7 (a)&(b)

- 12) What are “categorical pretreatment standards”?

Answer

They are national pretreatment standards, specifying quantities or concentrations of pollutants or pollutant properties that may be discharged or introduced to a POTW by an existing or new industrial user in a specific industrial subcategory, that are established by EPA.

327 IAC 5-17-3

- 13) What does “control authority” mean?

Answer

The commissioner or, in the case of a POTW with an approved POTW pretreatment program, the POTW.

327 IAC 5-17-5

- 14) What is a “four (4) day average discharge”?

Answer

The calculated result of totaling the mass or average concentration of all daily discharges sampled or measured during four (4) consecutive sampling days, though not necessarily consecutive calendar days, divided by the number of daily discharges sampled or measured.

327 IAC 5-17-8

- 15) What is “interference”?

Answer

It is a discharge that, alone or in conjunction with a discharge or discharges from other sources, does ONE (1) of the following:

- (a) Inhibits or disrupts the POTW, its treatment processes or operations, its sludge processes, or its selected sludge use or disposal methods.
- (b) Causes a violation of any requirement of the POTW’s NPDES permit, including an increase in the magnitude or duration of a violation.
- (c) Prevents the use of the POTW’s sewage sludge or its sludge disposal method selected in compliance with the following statutory provisions, regulations, or permits issued thereunder or more stringent state or local regulations:

- (1) Section 405 of the Clean Water Act (33 U.S.C. 1345).
- (2) The Solid Waste Disposal Act (SWDA) (42 U.S.C. 6901), including:
 - (A) Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA); and
 - (B) The rules contained in any state sludge management plan prepared pursuant to Subtitle D of the SWDA (42 U.S.C. 6941).
- (3) The Clean Air Act (42 U.S.C. 7401).
- (4) The Toxic Substances Control Act (15 U.S.C. 2601).

327 IAC 5-17-11

16) What is a “national pretreatment standard”?

Answer

Any regulation that applies to industrial users and contains pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and 307(c) of the federal Clean Water Act (33 U.S.C. 1317(b) and 33 U.S.C. 1317(c)).

327 IAC 5-17-12

17) What do “pretreatment standards” include?

Answer

- (a) State pretreatment standards;
- (b) Pretreatment standards for prohibited discharges; AND
- (c) National categorical pretreatment standards.

327 IAC 5-17-21

18) “Overflow” is defined as:

Answer

The intentional or unintentional diversion of wastewater flow from the POTW prior to the wastewater entering the POTW treatment plant.

327 IAC 5-17-14

19) “Pass through” is defined as:

Answer

A discharge proceeding through a POTW into waters of the state in quantities or concentration that, alone or in conjunction with a discharge or discharges from other sources, are a cause of a violation of any requirement of the POTW’s NPDES permit, including an increase in the magnitude or duration of a violation.

327 IAC 5-17-15

20) What is a “significant industrial user” or “SIU”?

Answer

- (a) Industrial users subject to categorical pretreatment standards under 327 IAC 5-18-10.
- (b) An industrial user that:
 - (1) Discharges an average of twenty-five thousand (25,000) gallons per day or more of process wastewater (excluding sanitary, noncontact cooling and boiler blowdown wastewater) to the POTW;
 - (2) Contributes a process wastestream that makes up five percent (5%) or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; OR
 - (3) Is designated as a significant industrial user by the control authority on the basis that the industrial user has a reasonable potential to:
 - (A) Adversely affect the POTW’s operation;
 - (B) Violate a pretreatment standard; or
 - (C) Violate a requirement of 327 IAC 5-19-3.
 (Except, a control authority may, on its own initiative or in response to a petition received from an industrial user or a POTW and in accordance with 327 IAC 5-19-3(6), determine that an industrial user is not a significant industrial user if it does not meet subsection (3) above.)

327 IAC 5-17-23

21) What is “significant noncompliance”?

Answer

It means the status of an industrial user that has caused or allowed a violation that meets one (1) or more of the following criteria:

- (a) Chronic violations of wastewater discharge limits.
- (b) Technical review criteria (TRC) violations.
- (c) Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the control authority determines has caused, alone or in combination with other discharges, interference or pass through, including endangering the health of POTW personnel or the general public.

- (d) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare, or to the environment or has resulted in the POTW's exercise of its emergency authority under 327 IAC 5-19-3(1)(G) to halt or prevent such a discharge.
- (e) Failure to meet, within ninety (90) days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance.
- (f) Failure to provide, within thirty (30) days after the due date, required reports.
- (g) Failure to accurately report noncompliance.
- (h) Any other violation or group of violations that the control authority determines will adversely affect the operation or implementation of the approved POTW pretreatment program.

327 IAC 5-17-24

22) What shall NOT be introduced to a POTW by a user of the POTW, whether or not the user is subject to categorical standards or state, local, or any other national pretreatment standard or requirement?

Answer

- (a) A pollutant from any source of nondomestic wastewaters that could pass through or cause interference with the operation or performance of the POTW.
- (b) A pollutant that could create a fire or explosion hazard in the POTW.
- (c) A pollutant that could cause corrosive structural damage to the POTW.
- (d) A solid or viscous pollutant in an amount that could cause obstruction to the flow in a sewer or other interference with the operation of the POTW.
- (e) A pollutant, including an oxygen demanding pollutant released in a discharge at a flow rate or pollutant concentration that could cause interference with the POTW.
- (f) Heat in an amount that could:
 - (1) Inhibit biological activity in the POTW and result in interference or damage to the POTW; OR
 - (2) Exceed 40 degrees Celsius (40°C) or 104 degrees Fahrenheit (104°F) at the POTW unless the commissioner, upon request of the POTW, approves alternate temperature limits.
- (g) Petroleum, oil, nonbiodegradable cutting oil, or products of mineral oil origin in an amount that cause interference or pass through.
- (h) A pollutant that could result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems.
- (i) A trucked or hauled pollutant, except:
 - (1) With the permission of the POTW; AND
 - (2) When introduced to the POTW at a discharge point designated by the POTW.

327 IAC 5-18-2(a)

23) What are the general provisions for the categorical pretreatment standards, unless specifically noted otherwise?

Answer

- (a) Enforceable by the commissioner against an industrial user upon the incorporation by reference of such standards in 327 IAC 5-18-10 in accordance with IC 4-22-2; AND
- (b) In addition to all applicable pretreatment standards and requirements in the pretreatment rules.

327 IAC 5-18-4(a)(1)

24) When is a POTW required to have a pretreatment program?

Answer

- (a) A POTW, or combination of POTWs operated by the same authority, that meets AT LEAST ONE of the following conditions must establish a POTW pretreatment program:
 - (1) Has a total design flow greater than five (5) million gallons per day (mgd) and receives pollutants, from one (1) or more industrial users, that may pass through or interfere with the operation of the POTW.
 - (2) Receives flow subject to pretreatment standards or requirements under 327 IAC 5-18.
- (b) A POTW with a design flow of five (5) mgd or less may also be required to develop a POTW pretreatment program if the commissioner determines that a pretreatment program to prevent interference or pass through at the POTW is warranted due to the nature or volume of one (1) or more of the following:
 - (1) Industrial influent.
 - (2) Treatment process upset.
 - (3) Violations of POTW effluent limitations.
 - (4) Contamination of municipal sludge.
 - (5) Other circumstances.
- (c) A POTW desiring to modify categorical pretreatment standards under 327 IAC 5-20 must have an approved POTW pretreatment program.

327 IAC 5-19-1

25) What is the purpose of a POTW pretreatment program?

Answer

The purpose of a POTW pretreatment program is to provide the POTW with the administrative and technical capability to ensure that industrial users of the POTW comply with applicable pretreatment standards and requirements. 327 IAC 5-19-2(a)

26) What are the requirements that an approved POTW pretreatment program must fully and effectively exercise and implement?

Answer

- (a) The POTW must operate under legal authority, enforceable in federal or state court.
- (b) The POTW shall have procedures to ensure compliance with the requirements of an approved POTW pretreatment program.
- (c) The POTW must have sufficient resources and qualified personnel to carry out the approved POTW pretreatment program.
- (d) The POTW must develop local limits as required or demonstrate that they are not necessary.
- (e) The POTW must develop and implement an enforcement response plan. This plan must contain detailed procedures demonstrating how a POTW will investigate and respond to instances of industrial user noncompliance.
- (f) The POTW shall prepare a list of its industrial users meeting the criteria in 327 IAC 5-17-22. This list, and any subsequent modifications, must be submitted to the commissioner as a nonsubstantial modification of the approved POTW pretreatment program. 327 IAC 5-19-3

27) POTWs not required to have an approved POTW pretreatment program must meet the following?

Answer

- (a) Comply with a decision of the commissioner who has the responsibility of implementing a POTW pretreatment program that will achieve the objectives stated in 327 IAC 5-16-1(b) if the commissioner determines that a need exists for such a POTW pretreatment program. Generally, such a state pretreatment program will be implemented at the local POTW through the use of procedures comparable to those described under section 3(2) of this rule and, ultimately, the issuance of appropriate industrial wastewater pretreatment permits under 327 IAC 5-21.
- (b) Develop, adopt, and enforce a sewer use ordinance that implements the standards for prohibited discharges in accordance with 327 IAC 5-18-2.
- (c) Comply with any requirements of the commissioner specified in the POTW's NPDES permit to perform certain elements of an approved POTW pretreatment program, such as monitoring for industrial pollutants in the discharges from the POTW's industrial users. 327 IAC 5-19-7

28) Under what conditions shall an industrial user be required to obtain an Industrial Wastewater Pretreatment (IWP) Permit for a discharge of wastewater into a POTW?

Answer

If ONE (1) of the following situations exists:

- (a) The discharge is from a significant industrial user as defined in 327 IAC 5-17-22 and is discharged into a POTW that is not required to have an approved POTW pretreatment program under 327 IAC 5-19-1.
- (b) The commissioner determines that an IWP permit is needed for effective control of an industrial discharge. 327 IAC 5-21-2(a)

29) What are the time requirements for the submission of IWP permit applications?

Answer

No later than:

- (a) 180 days prior to the expiration date of an existing permit.
- (b) 180 days prior to the date when a new industrial discharger intends to commence discharging to a POTW.
- (c) In the case of an initial issuance of an IWP permit to a significant industrial user or to an industrial user determined by the commissioner to be subject to the IWP permit requirements, no later than 120 days after the latter of:
 - (1) The promulgation of an applicable categorical pretreatment standard; OR
 - (2) The date of notification by the commissioner of a determination made according to section 2(a)(2) of this rule.
- (d) 120 days prior to a planned expansion or modification of production or treatment facilities or processes that are likely to cause a significant increase in quantity of pollutants or a change in the nature of pollutants discharged to the POTW by an industrial user with an existing IWP permit. 327 IAC 5-21-3

30) What requirements shall an IWP permit holder comply with?

Answer

- (a) The IWP permit as issued or modified.
- (b) The POTW receiving the permitted industrial discharge.
- (c) The local government having jurisdiction over the industrial discharge or the construction or operation of the discharging facility.

327 IAC 5-21-4

31) Do the provisions of the NPDES permits rule 327 IAC 5-2-6, concerning the duration, continuation, and transferability of NPDES permits also apply to IWP permits issued under this rule?

Answer

Yes.

327 IAC 5-21-5

32) What information must the IWP permittee provide the commissioner in the event of permit noncompliance (the permittee does not or will not be able to comply for any reason with any discharge limitation specified in the permit)? What is the time requirement for reporting?

Answer

- (a) A description of the discharge and cause of noncompliance.
- (b) The period of noncompliance, including exact dates and times of the noncomplying event and the anticipated time when the discharge will return to compliance.
- (c) Steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.
- (d) The permittee shall take all reasonable steps to minimize any adverse impact to the POTW or to waters of the state resulting from noncompliance with the IWP permit.
- (e) The information must be reported to the commissioner within 24 hours of an event of permit noncompliance.

327 IAC 5-21-6(c)&(d)

327 IAC ARTICLE 5. Rule 22. Operator Certification

1) If it is found that the certified operator has violated any provision of IC 13-18-11-8, the commissioner may ____A____ or ____B____ the wastewater treatment certificate of a wastewater treatment certified operator following a ____C____ pursuant to IC 4-21.5.

Answer

- (a) Suspend.
- (b) Revoke.
- (c) Hearing.

327 IAC 5-22-18

2) A person who is caught cheating on an examination will be ineligible to take any operator certification examination for a period of _____ following the examination date of the incidence of cheating.

Answer

Two years.

327 IAC 5-22-11(d)(2)(B)

3) When there is a change of the person serving as the certified operator in responsible charge of the wastewater treatment facility, the owner or governing body of a wastewater treatment plant shall notify the commissioner no later than _____ days after a change in the operator.

Answer

Thirty days.

327 IAC 5-22-10(a)

4) What is the definition of “acceptable experience”?

Answer

It is employment in the actual hands-on operation of a wastewater treatment plant. Experience in wastewater treatment plant maintenance will be given fifty percent (50%) credit for operational experience for those employed solely in this area. Experience in wastewater laboratory will be given full credit for operational experience for those employed solely in this area.

327 IAC 5-22-3(1)

5) What is the definition of “responsible charge experience”?

Answer

It is experience that is credited to the person responsible for the overall daily operation, supervision, or management of a water or wastewater facility. In Class III, IV, C, or D plants, the individual supervising and responsible for a major section of the plant or an operating shift may be credited with responsible charge experience.

327 IAC 5-22-3(10)

6) What is a “contact hour”?

Answer

A “contact hour” is a fifty (50) to sixty (60) minute instructional session involving a qualified instructor or lecturer. Ten (10) contact hours equals one (1) continuing education unit (CEU). For example, an operator receives a certificate upon completion of each of the California State Sacramento correspondence courses. California State grants nine (9) CEUs for most of their wastewater courses. This means that the operator has earned ninety (90) Indiana contact hours for this course. 327 IAC 5-22-3(7)

7) Define “population equivalent”.

Answer

“Population equivalent” or “PE” means the calculated population that would contribute the same amount of biochemical oxygen demand (BOD) per day using the base of seventeen-hundredths (0.17) pound of five (5) day BOD per capita per day. 327 IAC 5-22-3(9)

8) Define “design population equivalent”.

Answer

“Design population equivalent” means the PE for which the plant is designed. 327 IAC 5-22-3(8)

9) Define “training provider”.

Answer

A “training provider” is a person or organization that conducts or presents a course training session approved under this rule. 327 IAC 5-22-3(11)

10) A certified operator may be designated as being in responsible charge of more than one wastewater treatment plant if it can be demonstrated that the certified operator will give adequate supervision to all units involved. As used in this section, “adequate supervision” means:

Answer

- (a) That sufficient time is spent at the wastewater treatment plant on a regular basis to assure that the certified operator is knowledgeable of the actual operations.
- (b) That test reports and results are representative of the actual operational conditions.

327 IAC 5-22-10(b)

11) Certification examinations are to be held at places and times established by the commissioner:

Answer

- (a) With at least sixty (60) days advanced announcement; AND
- (b) Except in such cases as may be declared necessary exceptions by the commissioner.

327 IAC 5-22-11(a)(3)

12) Applications to sit for a certification examination must be:

Answer

Completed on an application form approved by the commissioner that:

- (a) Contains true and accurate information to the best of the applicant’s knowledge; AND
- (b) Is free of omissions and misrepresentations, either of which may result in rejection of the application or revocation of any certificate previously granted.

327 IAC 5-22-11(b)(1)

13) What is the deadline for exam applications to be postmarked?

Answer

Applications **MUST** be postmarked no later than forty-five (45) days prior to the examination day.

(There are no exceptions.)

327 IAC 5-22-11(b)(2)

14) A wastewater treatment certified operator needing a replacement or duplicate certificate must submit a written request to the commissioner, including the following information:

Answer

- (a) The class of wastewater treatment operator.
- (b) The name and classification of the wastewater treatment plant to be operated.
- (c) The date of issuance of the original certificate, if known.
- (d) The certificate number.

327 IAC 5-22-14(e)

15) A certification may be issued without testing in the following instances:

Answer

- (a) The Operator-in-Training certification.
- (b) By reciprocity with another U.S. state.
- (c) By provisional certification.
- (d) A certified operator holding a valid nonindustrial wastewater treatment certificate for Class I, Class II, Class III, or Class IV may obtain a Class A industrial certificate without examination by submitting an exam application for the Class A certificate and the application fee. A certified operator holding a valid industrial certificate for Class A, Class B, Class C, or Class D may obtain a Class I nonindustrial certificate without examination by submitting an exam application for the Class I certificate and the application fee.

327 IAC 5-22-11(g)

16) In accordance with 327 IAC 8-12-3.2(e), what water operator grades are qualified to apply for the appropriate wastewater treatment certification to treat wastewater from a water treatment plant provided the operator is certified to operate that classification of water treatment plant?

Answer

Grade WT3, WT4, and WT5

327 IAC 5-22-7(c)

17) A wastewater treatment facility may be reclassified by the commissioner if a change occurs to the wastewater treatment plant's operation, treatment process, or influent wastewater. What requirements must the commissioner fulfill?

Answer

The commissioner must:

- (a) Consider reclassification of a wastewater treatment plant based upon information supplied by the governing body or owner in a construction permit application for modification.
- (b) Give written notice of a reclassification to the governing body or owner and to the certified operator in responsible charge indicating the following:
 - (1) The classification of certified operator that is necessary to supervise the reclassified wastewater treatment plant.
 - (2) A date by which time a certified operator required according to 327 IAC 5-22-6(1) must be in responsible charge of the reclassified wastewater treatment plant.

327 IAC 5-22-6(a)

18) What type of situation must exist in order for the commissioner to reclassify a facility per 327 IAC 5-22-6(a)?

Answer

ONE (1) of the following conditions must exist:

- (a) The wastewater treatment plant utilizes special or complex equipment or features of design requiring more difficult operation.
- (b) The wastewater is unusually difficult to treat.
- (c) More than ordinary chemical or bacteriological controls are required.
- (d) An unusually high degree of skill is required in the operation of the wastewater treatment plant to assure continuous production of effluent that meets the water quality requirements of the receiving stream and the national pollutant discharge elimination system (NPDES) permit limitations.

327 IAC 5-22-6(b)

19) What types of wastewater treatment facilities may be classified as a Class D facility regardless of the average daily flow?

Answer

- (a) Deep well injection systems.
- (b) Thermal evaporators.
- (c) Incinerators used in conjunction with liquid waste disposal.
- (d) An industry utilizing a highly complex wastewater treatment method.

327 IAC 5-22-5(C)&(E)

20) If there are two (2) or more wastewater treatment plants at one (1) industrial site and each independent wastewater treatment plant is classified as a Class B or Class C wastewater facility, how will that industrial site be classified?

Answer

It will be classified as a Class D wastewater treatment facility.

327 IAC 5-22-5(D)

- 21) If an industrial wastewater treatment plant has more than one (1) treatment process despite having only one (1) wastewater treatment plant, that industrial wastewater treatment plant shall be classified into the classification of the most complex component of wastewater treatment performed in relation to what factors?

Answer

- (a) Secondary treatment PE.
- (b) Spray irrigation volume.
- (c) Chemical treatment volume.

327 IAC 5-22-5(b)

- 22) A certified operator must complete continuing education contact hours according to 327 IAC 5-22 Table 15(6). The subject matter of continuing education contact hours must be distributed according to the following:

Answer

- (a) A minimum of seventy percent (70%) of the required continuing education contact hours shall be obtained from the technical category of approved continuing education courses.
(Therefore an operator may choose to earn all contact hours in a technical subject.)
- (b) No more than thirty percent (30%) of the required continuing education contact hours shall be obtained from nontechnical subject matter of approved continuing education courses.

327 IAC 5-22-15(c)

- 23) When must a training provider submit an application to the commissioner to receive continuing education course approval?

Answer

The application must be submitted no less than sixty (60) days before the first date when the course is conducted.

327 IAC 5-22-16(a)(1)

- 24) What information must be included in an application for approval of a wastewater treatment continuing education course?

Answer

- (a) Name, address, and telephone number of a course sponsor, training provider, or other contact person;
- (b) Name of course;
- (c) Specific topics that are included in the course presentations;
- (d) Amount of time devoted to each topic;
- (e) Instructor's name and qualifications, including:
 - (1) Educational background;
 - (2) Professional experience; AND
 - (3) Current professional affiliation; AND
- (f) Dates and locations where the course will be offered.

327 IAC 5-22-16(1)(D)

- 25) The certified operator may petition the commissioner for approval of a wastewater treatment continuing education course if what procedures are met?

Answer

- (a) An application is submitted prior to or within thirty (30) days of course completion.
- (b) The application contains the information required by 5-22-16(a).
- (c) The certified operator supplies written proof of attendance at the wastewater treatment continuing education course within thirty (30) days following course completion.

327 IAC 327 IAC 5-22-16(b)

- 26) What qualifications must a continuing education course meet in order to be approved for continuing education contact hours?

Answer

The course deals with one or more of the following as determined by the commissioner:

- (a) Technical matters related directly to wastewater treatment.
- (b) General matters related to the responsibilities of a certified operator.

327 IAC 5-22-16(a)(2)

- 27) Can a certified operator who is an instructor or speaker at a wastewater treatment continuing education course earn contact hours for that course?

Answer

Yes, the instructor or speaker shall be credited the same number of contact hours as the students of the course.

327 IAC 5-22-15(c)

28) Can an operator transfer continuing education contact hours earned in another state? Does the state from which the operator is transferring credit have to have reciprocity with the state of Indiana?

Answer

Yes, the operator must meet the requirements of 327 IAC 5-22.

No, as long as the above criteria are met.

327 IAC 5-22-15(d)

29) Is partial credit granted for wastewater continuing education courses?

Answer

No, partial credit shall not be given to instructors, speakers, or students participating in less than a complete wastewater treatment continuing education course.

327 IAC 5-22-15(e)

30) What information must a training provider generate for each continuing education course conducted?

Answer

(a) The date of the wastewater treatment continuing education course.

(b) The name of each person in attendance at the wastewater treatment continuing education course.

(c) The length of time of the course.

(d) The instructor's name.

(e) The course content.

(f) The name of the organization sponsoring the course.

327 IAC 5-22-17(a)

31) How long must the training provider maintain the records required by 327 IAC 5-22-17(a) following the presentation of each wastewater treatment continuing education course?

Answer

Five (5) years.

327 IAC 5-22-17(b)

32) When applying for a course approval, training providers must submit the information required by 327 IAC 5-22-17(a) according to the following:

Answer

(a) On a form approved by the commissioner.

(b) Within thirty (30) days of the conclusion of the wastewater treatment continuing education course.

327 IAC 5-22-17(c)

327 IAC ARTICLE 6.1.

Application of Biosolid, Industrial Waste Product, and Pollutant-Bearing Wastewater

1) What does a land application permit regulate?

Answer

A land application permit regulates the disposal of any biosolid, contaminant that is an industrial waste product, or pollutant-bearing water by application upon or incorporation into the soil.

327 IAC 6.1-1-1(b)

2) What is "aerobic digestion" or "aerobic process"?

Answer

It is the biochemical decomposition of organic matter into carbon dioxide and water by microorganisms in the presence of oxygen.

327 IAC 6.1-2-2

3) Define "agricultural land".

Answer

"Agricultural land" means land used for the following purposes:

(a) Production of a food crop.

(b) Production of a feed crop.

(c) Production of a fiber crop.

(d) Production of trees for harvest.

(e) Pasture for animals.

327 IAC 6.1-2-3

4) What is "anaerobic digestion" or "anaerobic process"?

Answer

It is the biochemical decomposition of organic matter into methane gas and carbon dioxide by microorganisms in the absence of oxygen.

327 IAC 6.1-2-4

5) Define “annual pollutant loading rate”

Answer

It means the maximum amount of an inorganic pollutant that can be applied to any land during a three hundred sixty-five (365) day period. 327 IAC 6.1-2-5

6) Define “beneficial use”.

Answer

“Beneficial use” means the use of a material for fertilizing or soil conditioning properties to:

- (a) Provide nutrients for growing plants or crops;
- (b) Increase organic matter;
- (c) Provide pH adjustment capabilities; OR
- (d) Provide other benefits to the soil or crops as shown to the satisfaction of the commissioner through an approved research or demonstration project under 327 IAC 6.1-4-19.

327 IAC 6.1-2-6

7) Define “biosolid”

Answer

It means solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Examples include the following:

- (a) Scum or solids removed in primary, secondary, or advanced wastewater treatment processes.
- (b) A material derived from biosolid.
- (c) An industrial waste product that contains domestic sewage or material under (a) or (b) above.

Biosolid does not include ash generated during the firing of biosolid in a biosolid incinerator or grit and screenings generated during preliminary treatment of domestic sewage in a treatment works.

327 IAC 6.1-2-7

8) What does “cation exchange capacity” mean?

Answer

It is the sum of exchangeable cations a soil can absorb:

- (a) Expressed in milliequivalents per one hundred (100) grams of soil, as determined by sampling the soil to the depth of cultivation, sludge waste product placement, or wastewater placement, whichever is greater), AND
- (b) Analyzing by the summation method* for distinctly acid soils or the sodium acetate method for neutral, calcareous, or saline soils.

*See, “Methods of Soil Analysis, Agronomy No. 9”, C.A. Black, ed., pp., 149-157, 1982.

327 IAC 6.1-2-8

9) Define “cumulative pollutant loading rate”.

Answer

It is the maximum amount of an inorganic pollutant that can be applied to any land. 327 IAC 6.1-2-11

10) What does “disinfection” mean?

Answer

It means the destruction, neutralization, inhibition, inactivation or removal of pathogenic microorganisms by chemical, physical or biological means. 327 IAC 6.1-2-15

11) What is the “dry weight basis”?

Answer

It is the calculation of weight based on having been dried at one hundred three degrees Celsius (103°C) to one hundred five degrees Celsius (105°C) until reaching a constant weight.

327 IAC 6.1-2-18

12) Define “freeboard”.

Answer

“Freeboard” means the distance between the top of the stored biosolid, industrial waste product, or pollutant-bearing water and the overflow level of the storage structure. 327 IAC 6.1-2-24

13) Define “hazardous waste”.

Answer

Hazardous waste means waste regulated under 329 IAC 3.1

327 IAC 6.1-2-26

14) Define “incorporated into the soil”

Answer

It means the mixing of the biosolid or industrial waste product with the surface soil using standard agricultural practices such as tillage.

327 IAC 6.1-2-27

15) Define “industrial storm water”.

Answer

It means storm water that is regulated under 327 IAC 15-6.

327 IAC 6.1-2-30

16) What is an “industrial waste product”?

Answer

- (a) Material that is not considered biosolid or pollutant-bearing water under this article.
- (b) Material that is generated as waste in the production process and may be disposed of through:
 - (1) Surface application;
 - (2) Injection; OR
 - (3) Incorporation into the soil.
- (c) Material that meets the following criteria:
 - (1) Is a solid waste as defined under 329 IAC 10-2-174.
 - (2) Does not include material from any processes listed in 329 IAC 10-3-1.
 - (3) Is used for a beneficial use as defined under 327 IAC 6.1-2-6.

327 IAC 6.1-2-30

17) Define “injection”.

Answer

“Injection” means the direct, uniform placement of biosolid, industrial waste product, or pollutant-bearing water beneath the surface of the soil using equipment specifically for this purpose.

327 IAC 6.1-2-31

18) Define “land application”.

Answer

It means the beneficial use of a biosolid, industrial waste product, or pollutant-bearing water by:

- (a) Spraying or spreading onto the land surface;
- (b) Injection below the land surface; OR
- (c) Incorporation into the soil.

327 IAC 6.1-2-32

19) Define “land application operation”.

Answer

It means an operation in which biosolid, industrial waste product, or pollutant-bearing water prepared or generated by a person is disposed of by land application.

327 IAC 6.1-2-33

20) What is “land with a high potential for public exposure”?

Answer

This means land that:

- (a) Does not have restricted access;
- (b) Is easily accessible to the public; OR
- (c) Is used by the public during normal work or recreational activities.

327 IAC 6.1-2-34(a)

21) What is “land with a low potential for public exposure”?

Answer

This means land that:

- (a) Has restricted access;
- (b) Is inaccessible to the public; OR
- (c) Is not used by the public during normal work or recreational activities.

327 IAC 6.1-2-35(a)

22) How is “pasture” defined in the land application rule?

Answer

“Pasture” means land on which animals feed directly on vegetation, such as legumes, grasses, stubble, or stover.

327 IAC 6.1-2-38

23) Define “pathogenic organisms”.

Answer

It means disease-causing organisms, including the following:

- (a) Certain bacteria.
- (b) Protozoa.
- (c) Viruses.
- (d) Viable helminth ova.
- (e) Fungi.
- (f) Other disease-causing organisms.

327 IAC 6.1-2-39

24) What is a definition of pH?

Answer

“pH” means the logarithm of the reciprocal of the hydrogen ion concentration.

327 IAC 6.1-2-44

25) What does “pollutant” mean?

Answer

“Pollutant” means:

An organic substance, an inorganic substance, a combination of organic and inorganic substances, or a pathogenic organism that, after discharge and upon exposure, ingestion, inhalation, or assimilation into an organism either directly from the environment or indirectly by ingestion through the food chain, could, on the basis of information available to the commissioner, cause:

- (a) Death;
- (b) Disease;
- (c) Behavioral abnormalities;
- (d) Cancer;
- (e) Genetic mutations;
- (f) Physiological malfunctions, including malfunction in:
 - (1) Reproduction; OR
 - (2) Physical deformations in either organisms or offspring of the organisms.

327 IAC 6.1-2-45

26) What is a “pollutant limit”?

Answer

- (a) A numerical value that describes the amount of a pollutant allowed per unit amount of biosolid, industrial waste product, or pollutant-bearing water;
- (b) A numerical value that describes the amount of a pollutant that can be applied to a unit area of land; OR
- (c) A numerical value that describes the volume of a biosolid, industrial waste product, pollutant-bearing water that can be applied to a unit area of land.

327 IAC 6.1-2-47

27) What is “set aside” or “idle”?

Answer

It means agricultural land upon which no crop is grown during a crop season.

327 IAC 6.1-2-49

28) Define “specific oxygen uptake rate” or “SOUR”.

Answer

It means the mass of oxygen consumed per unit time per unit mass of percent total solids, dry weight basis, in the biosolid.

327 IAC 6.1-2-50

29) What is “staging”?

Answer

It is the temporary placement of a dewatered biosolid or industrial waste product in a pile for less than twenty-four (24) hours at the site where the dewatered biosolid or industrial waste product will be land applied.

327 IAC 6.1-2-51

30) Define “static aerated piles”.

Answer

“Static aerated piles,” means piles of biosolid that are aerated using a forced-aeration system installed under the piles to maintain a minimum oxygen level throughout the compost mass.

327 IAC 6.1-2-53

31) Define “stockpiling”.

Answer

It means the temporary placement of a dewatered biosolid or industrial waste product in a pile for more than twenty-four (24) hours but less than five (5) working days at the land application site in accordance with an approved management plan.

327 IAC 6.1-2-54

32) What does “storage” mean?

Answer

“Storage” means containment of biosolid, industrial waste product, or pollutant-bearing water for a period of two (2) years or less at the following:

- (a) Treatment plant.
- (b) Generating facility.
- (c) approved off-site storage structure or earthen lagoon.

327 IAC 6.1-2-55

33) Define “total solids”.

Answer

“Total solids means the fraction, often expressed as a percentage, of a material that remains in the biosolid or industrial waste product as residue when the biosolid or industrial waste product is dried at one hundred three degrees Celsius (103EC) to one hundred five degrees Celsius (105°C) until reaching a constant weight.

327 IAC 6.1-2-56

34) What is a “treatment works”?

Answer

It is any device or system used to treat, including recycle and reclaim, either domestic sewage, industrial waste of a liquid nature, or a combination of domestic sewage and industrial waste of a liquid nature.

327 IAC 6.1-2-57

35) Define “unstabilized solids”?

Answer

It means the organic materials in biosolid that have not been treated in:

- (a) An aerobic treatment process; OR
- (b) An anaerobic treatment process.

327 IAC 6.1-2-58

36) What is “vector attraction”?

Answer

“Vector attraction,” means the characteristic of biosolid that attracts:

- (a) Rodents;
- (b) Flies;
- (c) Mosquitoes; or
- (d) Other organisms capable of transporting infectious agents.

327 IAC 6.1-2-59

37) Define “volatile solids”.

Answer

Volatile solids means the amount of the percent total solids in biosolid or pollutant-bearing water lost when the biosolid or pollutant-bearing water is combusted at five hundred fifty degrees Celsius (550EC) in the presence of excess oxygen.

327 IAC 6.1-2-60

38) Define “wetlands”

Answer

It means those areas that are inundated or saturated by surface water or ground water at a frequency and duration to support and that, under normal circumstances, do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include the following:

- (a) Swamps.
- (b) Marshes.
- (c) Bogs.
- (d) Similar areas.

327 IAC 6.1-2-62

39) What is “windrow composting”?

Answer

It is a process where biosolid is composted in long rows that are aerated by convective air movement and diffusion and turned periodically as required in 327 IAC 6.1-4-14 by mechanical means to expose the organic matter to ambient oxygen.

327 IAC 6.1-2-63

40) Define “within-vessel”.

Answer

It means biological stabilization of biosolid under controlled aerobic conditions in a closed vessel or an enclosed structure.

327 IAC 6.1-2-64

41) How many days prior to the land application of sludge should a municipality apply for the renewal of an existing or for a new land application permit?

Answer

A permit application must be submitted at least 180 days prior to the proposed commencement of the operation.

327 IAC 6.1-3-1(b)

42) What is the maximum duration of a land application permit?

Answer

Except as specifically provided for elsewhere in this article or by Indiana statute, permits may be issued by the commissioner for any period of time not to exceed five (5) years as specified by IC 13-15-3.

327 IAC 6.1-3-4

43) What is the procedure to transfer a permit issued under 327 IAC 6.1?

Answer

- (a) The permittee notifies the commissioner of the proposed transfer at least forty-five (45) days prior to the date of the proposed transfer of the permit; AND
- (b) A written agreement is submitted to the commissioner containing the information specified in 327 IAC 6.1-3-5(a)(2)(B).

327 IAC 6.1-3-5(a)

44) Application of a biosolid or industrial waste product must not be conducted within _____ of any **waters of the state** except by subsurface injection or incorporation by the end of the day.

Answer

300 feet.

327 IAC 6.1-4-6(a)(2)

45) Application of a biosolid or industrial waste product must not be conducted within _____ of **residence**, except by subsurface injection.

Answer

300 feet.

327 IAC 6.1-4-6(a)(3)

46) Application of a biosolid or industrial waste product must not be conducted within _____ of any well.

Answer

50 feet.

327 IAC 6.1-4-6(a)(4)

47) Application of a biosolid or industrial waste product must not be conducted within _____ of a potable water well or drinking water spring.

Answer

200 feet.

327 IAC 6.1-4-6(a)(5)

48) Application of a biosolid or industrial waste product must not be conducted within _____ of any public building or public or nonpublic school.

Answer

50 feet of the property line.

327 IAC 6.1-4-6(a)(6)

49) Liquid biosolid or industrial waste product may be applied by surface application on slopes that are no greater than _____.

Answer

Eighteen per cent (18%).

327 IAC 6.1-4-6(d)

50) Site restrictions for the land application of biosolid or industrial waste product must not be applied to land unless there is a minimum depth of _____ inches of soil overlying bedrock.

Answer

Twenty inches.

327 IAC 6.1-4-6(e)

51) Unless the commissioner grants an exception, what must the soil pH level be at the time a biosolid, containing a cadmium level of no more than two (2) milligrams per kilogram or greater is land applied?

Answer

Soil pH of 5.5 or greater.

327 IAC 6.1-4-6(f)

52) Where can an operator obtain the information necessary to perform the “electronic method” required in 327 IAC 6.1-4-6(h)?

Answer

The “electronic method” required in 327 IAC 6.1-4-6(h) may be found in “Methods of Soil Analysis, Agronomy Monograph No. 9.” (C.A. Black, ed., American Society of Agronomy, Madison, Wisconsin, pp. 199-209, 1982, Soil Science of America, Inc., 677 South Segoe Road, Madison, Wisconsin 53711. At the time of printing, this document is available from IDEM, Office of Land Quality, for copying.)

327 IAC 6.1-4-6 (footnote)

53) A wastewater treatment plant is planning to apply on land used for the production of food crops. How long must the farmer wait before s/he can harvest a food crop if the harvested part (1) touches the ground where the biosolid has been applied; and (2) has no harvested parts below the soil surface?

Answer

Fourteen (14) months after application of a biosolid.

327 IAC 6.1-4-7(a)

54) Grazing of animals on land that has received biosolid is prohibited for _____ after the application of biosolid.

Answer

Thirty days.

327 IAC 6.1-4-7(e)

55) Except for a Class A biosolid under section 13(b) of this rule:

Public access to land with a HIGH potential for public exposure shall be restricted for ____A____ after application; and public access to land with a LOW potential for public exposure shall be restricted for ____B____ after application of biosolid to that land.

Answer

- (a) One (1) year.
- (b) Thirty (30) days.

327 IAC 6.1-4-7(g)&(h)

56) A biosolid or industrial waste product may only be applied to land that is frozen or snow-covered if _____ .

Answer

- (a) A biosolid or industrial waste product does not enter a wetland or other waters of the state; and
- (b) A management plan has been submitted and approved by the commissioner including the following:
 - (1) Setbacks;
 - (2) Application rates;
 - (3) Site characteristics;
 - (4) Supervision and operational oversight; AND
 - (5) Other applicable information.

327 IAC 6.1-4-7(l)

57) During inclement weather when biosolids or industrial waste products cannot be land applied, what must a facility do with the biosolids or industrial waste products that are continually being produced?

Answer

Each facility that holds a land application permit is required to have a minimum of (ninety) 90 days effective storage capacity for biosolid or industrial waste product unless the commissioner approves an equivalent method of meeting the requirement.

327 IAC 6.1-4-8(a)

58) A biosolid or industrial waste product for land application may be stored for no more than _____ .

Answer

Two years.

327 IAC 6.1-4-8(e)

59) There are nine heavy metals that must be monitored during land application activities. Which ceiling concentration limit of these nine metals is the most stringent?

Answer

Mercury.

327 IAC 6.1-4-9

60) What unit is used to express the maximum annual metal loading rates for sites where biosolid or industrial waste product is land applied?

Answer

Pounds per acre per 365-day period.

327 IAC 6.1-4-9(d)

61) Maximum crop and annual loading rates are determined for biosolid or industrial waste product to be applied on the basis of what?

Answer

Plant Available Nitrogen (PAN). This is the nitrogen removal rate for the proposed crop to be grown on the land application site.

327 IAC 6.1-4-10(a)

62) The nitrogen removal rate for a proposed crop to be grown on a land application site is adjusted to account for application of fertilizers, manure and the presence of _____ in the soil from previous applications of biosolid, industrial waste product or pollutant-bearing water.

Answer

Residual available nitrogen

327 IAC 6.1-4-10(b)(B)

63) What are the formulae for PAN loading calculations use in 327 IAC 6.1 to calculate the amount of PAN in the biosolid or industrial waste product and the residual available nitrogen at the application site?

Answer

All calculations are based on a percent dry weight basis (where "N" = nitrogen):

(a) %Total N = %Total Kjeldahl N + %Nitrate N

(b) %Organic N = %Total N – (%Ammonium N + Nitrate N)

(c) Pounds Organic N per dry ton of industrial waste product or biosolid, except anaerobically digested biosolid, available during year of application = %Organic N x 6

(d) Pounds Organic N per dry ton of anaerobically digested biosolid available during year of application = %Organic N x 4

(e) Pounds of Ammonium N per dry ton = % Ammonium N x 20

(f) Pounds of Nitrate N per dry ton = %Nitrate N x 20

(g) Pounds PAN per dry ton = Pounds of Organic N per dry ton + Pounds of Ammonium N per dry ton + Pounds of Nitrate N per dry ton

(h) Residual nitrogen from past biosolid or industrial waste product applications:

(1) Pounds of residual N from industrial waste product or biosolid, except anaerobically digested biosolid, available one (1) year after application = %Organic N x 3 x dry tons applied per acre

(2) Pounds of residual N from anaerobically digested biosolid available one (1) year after application = %Organic N x 2 x dry tons applied per acre

(3) Pounds of residual N from industrial waste product or biosolid, except anaerobically digested biosolid, available two (2) years after application = %Organic N x 1.6 x dry tons applied per acre

(4) Pounds of residual N from anaerobically digested biosolid available two (2) years after application = %Organic N x dry tons applied per acre

(5) Pounds of residual N from industrial waste product or biosolid, except anaerobically digested biosolid, available three (3) years after application = %Organic N x 0.8 x dry tons applied per acre

(6) Pounds of residual N from anaerobically digested biosolid available three (3) years after application = %Organic N x 0.5 x dry tons applied per acre

327 IAC 6.1-4-10(b)

64) Land application of a biosolid or industrial waste product containing concentrations of polychlorinated biphenyls (PCBs) at _____ or greater on a dry weight basis is prohibited.

Answer

2 mg/kg.

327 IAC 6.1-4-12

65) The characteristics of a biosolid or industrial waste product must be monitored as required in Table 6 of 327 IAC 6.1-4-16(e). What are the total metals listed?

Answer

Arsenic, cadmium, copper, lead, mercury, molybdenum, nickel, selenium, and zinc.

327 IAC 6.1-4-16(e)(2)

66) The land application rule, 327 IAC 6.1, establishes standards for monitoring and analysis requirements. Prior to land application, representative samples of biosolid or industrial waste product must be analyzed for what?

Answer

Biosolid or industrial waste product that is to be land applied shall be collected and analyzed for percent total solids, total metals, polychlorinated biphenyls (PCBs), applicable pathogen density requirements, and applicable vector attraction reduction requirements at the frequency listed in Table 6 in 327 IAC 6.1-4-16(f).

327 IAC 6.1-4-16(e)

67) A nutrient sample (i.e. percent total solids, total nitrogen, ammonia N, nitrate N, phosphorus and potassium) is to be analyzed from a composite taken as land application activities take place. This composite is to represent activities during a period not to exceed _____.

Answer

Thirty days.

327 IAC 6.1-4-16(i)

68) The person who prepares the biosolid or industrial waste product must record information regarding application rates and site conditions daily, or as specified by the permit. These records must be:

Answer

- (a) Retained by the person who prepares the biosolid or industrial waste product for a minimum of five (5) years or longer if required by the commissioner or permit; AND
- (b) Accessible to department representatives at the facility or other location clearly identified in writing to the commissioner.

327 IAC 6.1-4-17

69) Activities and analyses related to land application of biosolid or industrial waste product must be:

Answer

- (a) Reported within thirty (30) days of the last day of each calendar month for the term of the permit, AND
- (b) Submitted on forms and in a format prescribed by the commissioner.

327 IAC 6.1-4-18(a)

70) What are the requirements for alternative uses of permitted biosolid at a permittee domestic sewage treatment works?

Answer

- (a) The biosolid must be dewatered.
- (b) No more than one (1) dry ton of a biosolid may be used during any twelve (12) month period.
- (c) A biosolid may not be used on land with a high potential for public exposure.
- (d) Application of a biosolid must be in accordance with the permit.

327 IAC 6.1-4-20

71) What are the criteria for a biosolid to be eligible for marketing and distribution?

Answer

The following criteria must be met:

- (a) The Class A pathogen requirements in 327 IAC 6.1-4-13(b).
- (b) Compliance with at least one (1) of the vector attraction reduction requirements in 327 IAC 6.1-4-15-(b)(1) through 327 IAC 6.1-4-15(b)(8) or an equivalent vector attraction reduction requirement as determined by the commissioner.
- (c) The pollutant concentrations are less than the concentrations in Table 1 in 327 IAC 6.1-4-9(a) and Table 3 in 327 IAC 6.1-4-9(c).
- (d) The biosolid must be dewatered.
- (e) The biosolid must not contain a concentration of polychlorinated biphenyls (PCBs) of two (2) milligrams per kilogram or greater on a dry weight basis.

327 IAC 6.1-5-1

72) Processes to significantly reduce pathogens (PSRP) vary according to?

Answer

Type of process, i.e. – aerobic digestion, air drying, anaerobic digestion, composting and lime stabilization, and
Type of pathogen, i.e. – Class A and Class B

327 IAC 6.1-4-14

73) Land application or injection of pollutant of pollutant-bearing water must be conducted under the supervision of:

Answer

- (a) A certified wastewater treatment plant operator; OR
- (b) A person with at least one (1) year of experience in land application management practices and procedures.
(Notice must be submitted to the commissioner of any change in supervisor of the activity.)

327 IAC 6.1-7-1(a)

74) The supervisor of a domestic sewage treatment works requiring disinfection equipment dependent upon electricity for operation shall submit documentation, for approval by the commissioner, demonstrating ability to:

Answer

Provide an alternative power source sufficient to operate pathogen reduction equipment for to a degree that pathogen limitations detailed below can be achieved:

- (a) Upon the reduction, loss, or failure of power to the disinfection equipment, cease land application of domestic wastewater and cease discharge to a domestic wastewater storage structure used for land application of domestic wastewater for a period of seventy-two (72) hours; OR
- (b) Provide an effective alternate method of disinfection, sufficient to a degree that pathogen limitations detailed above are achieved, approved by the commissioner, that does not require electricity for proper operation

327 IAC 6.1-7-7(2)&(3)

75) What are the formulae for PAN loading calculations, that apply to 327 IAC 6.1-7, and must be used to calculate the amount of PAN in the pollutant-bearing water and the residual available nitrogen at the application site (all calculations are based on a wet weight basis in milligrams per liter) (where N = nitrogen):

Answer

(a) Pounds Organic N applied per acre = $\frac{(\text{Organic N}) H(\text{gallons applied}) \times (8.34)}{(3.33) H(1,000,000) H(\text{acres applied to})}$

(b) Pounds of Ammonium N applied per acre = $\frac{(\text{Ammonium N}) H(\text{gallons applied}) H(8.34)}{(1,000,000) H(\text{acres applied to})}$

(c) Pounds of Nitrate N applied per acre = $\frac{(\text{Nitrate N}) H(\text{gallons applied}) H(8.34)}{(1,000,000) H(\text{acres applied to})}$

(d) Pounds PAN applied per acre = Pounds of Organic N applied per acre + Pounds of Ammonium N applied per acre + Pounds of Nitrate N applied per acre

(e) Residual nitrogen from past biosolid or industrial waste products applications:

(1) Pounds of residual N available per acre after one (1) year = $\frac{(\text{Organic N}) H(\text{gallons applied}) H(8.34)}{(6.67) H(1,000,000) H(\text{acres applied to})}$

(2) Pounds of residual N available per acre after two (2) years = $\frac{(\text{Organic N}) H(\text{gallons applied}) H(8.34)}{(12.5) H(1,000,000) H(\text{acres applied to})}$

(3) Pounds of residual N available per acre after three (3) years = $\frac{(\text{Organic N}) H(\text{gallons applied}) H(8.34)}{(25) H(1,000,000) H(\text{acres applied to})}$

327 IAC 6.1-7-10(b)

76) Requests for approval of an earthen lagoon must be:

Answer

- (a) Submitted at least ninety (90) days prior to the intended date of construction.
- (b) Plans, specifications, and sufficient information to indicate compliance with the requirements of 327 IAC 6.1 must accompany the request for approval. The applicant shall submit additional information as may be required by the commissioner to make a determination.
- (c) A registered professional engineer licensed to practice in Indiana must certify plans and specifications for earthen lagoons.

327 IAC 6.1-8-2

77) Off-site storage structures, except for earthen lagoons, must not be constructed or maintained:

Answer

- (a) Within one thousand (1,000) feet of any residence or public building;
- (b) Within three hundred (300) feet of any waters of the state;
- (c) Within two hundred (200) feet of any well;

- (d) In a flood plain; AND
- (e) In a manner that allows the biosolid, industrial waste product, or pollutant-bearing water to enter surface waters.
327 IAC 6.1-8-3(a)

78) Earthen lagoons must not be constructed or maintained:

Answer

- (a) Within one thousand (1,000) feet of any residence, public building, or property line;
- (b) Within six hundred (600) feet of any waters of the state;
- (c) Within two hundred (200) feet of any well;
- (d) In a flood plain; AND
- (e) In a manner that allows the biosolid, industrial waste product, or pollutant-bearing water to enter surface waters.
327 IAC 6.1-8-3(b)

79) The off-site storage structure must be maintained and operated to prevent any ____A____ or ____B____ as outlined in 327 IAC 6.1-8-7.

Answer

- (a) Nuisance.
- (b) Health hazards.
327 IAC 6.1-8-7

80) In the event an off-site storage structure ceases to be operated or used for more than ____A____, it is the responsibility of ____B____ to abandon the off-site storage structure properly.

Answer

- (a) Two (2) years.
- (b) The person who signed the statement submitted in accordance with 327 IAC 6.1-8-1(e).
327 IAC 6.1-8-8

327 IAC ARTICLE 15. NPDES General Permit Program

1) What is an “existing discharge”?

Answer

It is any point source discharge of process or storm water that occurs either continuously or intermittently from a property at the time coverage under an individual NPDES permit is being sought.

327 IAC 15-1-2(1)

2) What is a “general permit rule boundary”?

Answer

It is an area based upon existing geographic or political boundaries indicating the area within which a facility affected by 327 IAC 5-15 is located.

327 IAC 15-1-2(2)

3) What is a “Notice of Intent” or “(NOI)” letter?

Answer

It is a written notification indicating a person’s intention to comply with the terms of a specified general permit rule in lieu of applying for an individual NPDES permit and includes information as required under 327 IAC 15-3 and the applicable general permit rule.

327 IAC 15-1-2(4)

4) How is “storm water” defined?

Answer

It means water resulting from rain, melting or melted snow, hail, or sleet.

327 IAC 15-1-2(5)

5) What types of existing geographic or political boundaries does the general permit rule correspond with?

Answer

- (a) Designated planning areas under the Federal Act;
- (b) Regional sewer districts or sewer authorities;
- (c) City, county, or state political boundaries;
- (d) State highway systems;
- (e) Standard metropolitan statistical areas;
- (f) Urbanized areas as defined by the Bureau of Census according to the criteria in 39 FR 15202 (May1, 1974); OR
- (g) Any other appropriate divisions or combinations of the boundaries in this subdivision that will encompass the sources subject to the general permit rule

327 IAC 15-2-2(c)(1)

6) A general permit is a “permit-by-rule”. What does that mean?

Answer

It means that the statutory requirements for administrative agency rulemaking must be satisfied in the development of a general permit rule. 327 IAC 15-2-4

7) What are general requirements for a “Notice of Intent” or “(NOI)” letter?

Answer

- (a) Any person subject to the requirements of this article shall submit a NOI letter that complies with 327 IAC 15-3, and the additional requirements in any applicable general permit rule.
- (b) A NOI letter shall be submitted to the commissioner by the time specified under 327 IAC 15-3 or the time indicated in the applicable general permit rule.
- (c) The person responsible for the operation of the facility from which a point source discharge of pollutants and/or storm water occurs must submit a NOI letter. 327 IAC 15-2-5

8) If ownership/operation of a facility is transferred to a new person, can the NOI (Notice of Intent) letter be transferred?

Answer

No, compliance with the NOI letter submission requirements under 327 IAC 15 may not be transferred. If ownership/operation is changed, the new person must submit a NOI letter pursuant to 327 IAC 15-3 or seek coverage under an individual NPDES permit pursuant to 327 IAC 5. 327 IAC 15-2-8(a)

9) If the commissioner requests that the person who filed a NOI (Notice of Intent) letter subsequently file an application for an individual NPDES permit, how long does that person have to file the NPDES application?

Answer

120 days. 327 IAC 15-2-8(b)

10) What shall the NOI (Notice of Intent) letter include?

Answer

- (a) Name, mailing address, and location of the facility for which the notification is submitted.
- (b) Standard Industrial Classification (SIC) codes, as defined in 327 IAC 5, up to four (4) digits, that best represent the principal products or activities provided by the facility.
- (c) The person’s name, address, telephone number, ownership status, and status as federal, state, private, public, or other entity.
- (d) The latitude and longitude of the approximate center of the facility to the nearest fifteen (15) seconds, or the nearest quarter section (if the section, township, and range are provided) in which the facility is located.
- (e) The name of receiving water, or, if the discharge is to a municipal separate storm sewer, the name of the municipal operator of the storm sewer and the ultimate receiving water.
- (f) A description of how the facility complies with the applicability requirements of the general permit rule.
- (g) Any additional NOI letter information required by the applicable general permit rule.
- (h) The NOI letter must be signed by a person meeting the signatory requirements in 327 IAC 15-4-3(g). 327 IAC 15-3-2

11) If you propose a new discharge that will be subject to a general permit rule, except for construction activity, how much time do you have to submit the NOI (Notice of Intent) letter and any required additional information?

Answer

You have 180 days before the date on which the discharge is to commence, unless the commissioner approves a later date. 327 IAC 15-3-3(a)

12) Any person operating coverage under a general permit rule with an existing discharge has _____ to submit the NOI (Notice of Intent) letter unless the commissioner approves a later date or the general permit rule allows it.

Answer

90 days. 327 IAC 15-3-3(b)

13) What is the purpose of the storm water run-off associated with construction activity rule?

Answer

It is to reduce pollutants, principally sediment as a result of soil erosion, in storm water discharges into surface waters of the state from sites where construction activity disturbs five (5) acres or more of the site. However, in contemplation of recent federal court decisions, persons with sites greater than one (1) acre but less than five (5) acres are invited to comply with this rule as well. 327 IAC 15-5-1

14) What type of activity does the “storm water run-off associated with construction activity” rule cover?

Answer

It covers construction activity, which includes clearing, grading, excavation, and other land disturbing activities, except operations that result in the disturbances of less than five (5) acres of total land area and that are not a part of a larger common plan of development or sale. 327 IAC 15-5-2(3)

15) Define “erosion”.

Answer

It means the detachment and movement of soil, sediment, or rock fragments by water, wind, ice, or gravity. 327 IAC 15-5-4(2)

16) What is a “land disturbing activity”?

Answer

It means any manmade change of the land surface, including removing vegetative cover, excavating, filling, transporting, and grading. (Agricultural land disturbing activities, coal mining activities are permitted by DNR, and active landfills are permitted by IDEM where the permit requires soil erosion control. 327 IAC 15-5-4(5)

17) What are some of the monitoring requirements for storm water associated with industrial activity?

Answer

Monitoring and reporting requirements shall be as follows:

(a) Each discharge outfall, or representative discharge outfall, composed entirely of storm water run-off, shall be monitored as follows:

Parameter	Units	Sample Type
Oil and grease	mg/l	grab
CBOD ₅	mg/l	grab and composite
COD	mg/l	grab and composite
TSS	mg/l	grab and composite
TKN	mg/l	grab and composite
T. phosphorous	mg/l	grab and composite
pH	s.u.	grab
Nitrate plus nitrite nitrogen	mg/l	grab and composite

For those facilities:

- (1) Subject to Federal Categorical Effluent Guidelines (40 CFR Subchapter N, in effect on February 12, 1992);
- (2) Sara Title III facilities subject to report releases into the environment of chemicals that are classified as section 313 water priority chemicals used at the plant in the previous reporting year and that are reasonably expected to be in the discharge; OR
- (3) An individual NPDES permit for process discharge.

Those parameters required under these programs that are not listed in this subsection shall also be monitored and sampled by grab and composite, except cyanide, hexavalent chromium and volatile organic compounds, which shall be sampled by the grab sample method. 327 IAC 15-6-7(d)(1)&(2)

18) What are some of the sampling requirements for storm water associated with industrial activity?

Answer

- (a) A grab sample shall consist of at least one hundred (100) milliliters collected during the first thirty (30) minutes, or as soon thereafter as practicable, of the discharge. The grab sample shall be analyzed separately from the composite sample. A composite sample shall consist of a flow or time-weighted sample, either by the time interval between each aliquot or by the volume of aliquot proportionate to the discharge flow at the time of sampling or the total discharge flow since collection of the previous aliquot. A composite sample shall be taken during a minimum of the first three (3) hours of a storm event.
- (b) There shall be a minimum of three (3) months between reported sampling events.
- (c) Samples taken in compliance with the monitoring requirements under 327 IAC 15-6-7(d)(4) shall be taken at a point representative of the discharge but prior to entry into surface waters of the state of Indiana or a municipal separate storm sewer.
- (d) Sampling type for discharges from a retention basin with a minimum twenty-four (24) hour detention capacity, or, for coal mines, ten (10) hour detention, shall be a grab sample for all parameters. Such a grab shall be taken within the first thirty (30) minutes of discharge from the pond after initiation of a storm event.
- (e) 11 samples shall be collected from a discharge resulting from a measurable storm event at least seventy-two (72) hours from the previous measurable storm event and, where feasible, where the duration and total precipitation

- does not exceed fifty percent (50%) from the average or median precipitation event in the area, as determined by the nearest United States National Weather Service Information Center. Documentation of weather conditions that prevent sampling as described in this subsection must be provided to the commissioner.
- (f) The analytical and sampling methods used shall conform to the current version of 40 CFR 136 as referenced in 327 IAC 5-2-13(c)(1).
 - (g) Samples and measurements taken as required under this subsection shall be representative of the volume and nature of the monitored discharge.
 - (h) Analysis shall be performed in accordance with 40 CFR 136, in effect on February 12, 1992, for quality assurance and quality control. 327 IAC 15-6-7(d)

19) What is the purpose of the rule that regulates the mining of coal, coal processing, and reclamation activities?

Answer

It is to regulate wastewater discharges from surface mining, underground mining, and reclamation projects that utilize sedimentation basin treatment for pit dewatering and surface run-off and to require Best Management Practices for storm water run-off so that the public health, existing water uses, and aquatic biota are protected. 327 IAC 15-7-1

20) Additional discharge requirements under the rule regulating facilities engaged in mining of coal, coal processing, and reclamation activities include:

Answer

A person regulated under this rule shall comply with the following additional discharge requirements:

- (a) The pH of the water contained in any water pollution treatment/control facility cannot be adjusted by the use of anhydrous ammonia. The only approved water treatment additives for pH adjustment are:
 - (1) Sodium hydroxide;
 - (2) Hydrated lime;
 - (3) Calcined (unslaked or quick) lime;
 - (4) Soda ash;
 - (5) Lime
 - (6) Sodium bicarbonate; OR
 - (7) Other water treatment additive approved by IDEM.
 - (b) The discharge shall not cause excessive foam in the receiving waters.
 - (c) The discharge shall be essentially free of floating and settleable solids.
 - (d) The discharge shall not contain oil or other substances in amounts sufficient to create a visible film or sheen on the receiving waters.
 - (e) The discharge shall be free of substances that are in amounts sufficient to be unsightly or deleterious or that produce color, odor, or other conditions in such a degree as to create a nuisance.
 - (f) For discharges of storm water run-off composed entirely of flows from conveyances used for collecting and conveying precipitation run-off that are:
 - (1) Contaminated by contact with overburden, coal product, coal byproduct, or coal waste located on the site; AND
 - (2) Do not otherwise report to a NPDES discharge point regulated under this rule.
- The permittee shall use Best Management Practices including, but not limited to, secondary sedimentation control structures such as rip rap, straw dikes, check dams, mulch, dugouts, or other measures that reduce overload flow velocity, reduce run-off volume, or trap sediment to control run-off from such areas. Compliance with this subdivision obviates the need to comply with 327 IAC 15-6. 327 IAC 15-7(b)

21) What is the purpose of the rule regulating facilities discharging noncontact cooling water?

Answer

The purpose of this rule is to regulate the discharge of once through noncontact cooling water that is free from wastewater generated by manufacturing processes and other types of wastewater discharges so that the public health, existing water uses, and aquatic biota are protected. 327 IAC 15-8-1

22) What is "once through noncontact cooling water"?

Answer

It is cooling water that is:

- (a) Used for the sole purpose of removing unwanted heat from a process;
- (b) Only makes one (1) pass through a unit that exchanges heat between the process and the cooling water (generally a heat exchanger); AND
- (c) Does not come into contact with any raw material or manufactured product.

In the context of this rule, the term excludes discharges from steam electric power generation facilities defined under 40 CFR 423 327 IAC 15-8-2

23) Define “petroleum products terminals”?

Answer

It means an area where petroleum products are:

- (a) Supplied by pipeline or barge;
- (b) Stored in aboveground tanks;
- (c) Transferred to trucks for transport to other locations; OR
- (d) Where petroleum products are stored in aboveground tanks and are transferred to trucks for transport to other locations.

327 IAC 15-9-2(4)

24) What is a “wastewater discharge associated with petroleum products terminal”?

Answer

It is the discharge from any conveyance, used for collecting and conveying wastewater that is directly related to the storage area of the petroleum products terminal. This includes storm water run-off, tank bottom water, and water used for hydrostatically testing the storage tanks.

327 IAC 15-9-2(5)

25) What is a “wastewater discharge associated with ground water remediation system”?

Answer

It is a discharge from any conveyance that is used for collecting and conveying wastewater that is directly related to the ground water remediation system.

327 IAC 15-10-2(4)

26) What does a “wastewater discharge associated with ground water remediation system” apply to?

Answer

It applies to the discharge of treated ground water back into the ground immediately upgradient of the contaminated site, and the subsequent movement of this water downgradient to the treatment site that causes further contaminants to be flushed from the site and to enhance the remediation.

327 IAC 15-10-3(3)

27) What is “wastewater discharge associated with hydrostatic testing of commercial pipelines”?

Answer

It is the discharge from conveyance, used for collecting and conveying wastewater that is directly related to commercial pipelines. This includes discharge of water used for hydrostatically testing new or existing pipelines.

327 IAC 15-11-2-(5)

28) What is the purpose of the rule that regulates wastewater discharges from sand, gravel, dimension stone, and crushed stone operations that utilize sedimentation basin treatment?

Answer

- (a) Pit dewatering;
- (b) Channel machines;
- (c) Broaching;
- (d) Jet piercing;
- (e) Scrubber water from wet scrubbers used for air pollution control;
- (f) Dust suppression spray water
- (g) Wash water from spray bars for final screening operations; AND
- (h) Noncontact cooling water for cooling of:
 - (1) Crusher bearings
 - (2) Drills
 - (3) Saws
 - (4) Dryers
 - (5) Pumps;
 - (6) Air compressors;

So that the public health, existing water uses, and aquatic biota are protected.

327 IAC 15-12-1

29) Some of the above facilities that discharge from sand, gravel, dimension stone, or crushed stone operations that utilize sedimentation basin treatment are not allowed to discharge by the NPDES general permit rule. They are required to obtain an individual NPDES permit. What does this include?

Answer

- (a) Crushed stone operations utilizing flotation agents to remove impurities from marble or other carbonaceous rock. The flotation agents utilized include:
 - (1) Organic amines;
 - (2) Fatty acids; AND
 - (3) Pine oils.

- (b) Industrial sand operations utilizing:
 - (1) Acid flotation to effect removal of iron oxide and ilmenite impurities;
 - (2) Alkaline flotation to remove aluminate bearing materials; OR
 - (3) Hydrofluoric acid flotation for removal of feldspar.
 - (c) Industrial sand operations utilizing the acid leaching process. The acid leaching process pertains to the removal of iron from feldspathic sand for use in glass manufacturing. A strong hydrochloric or sulfuric acid is used.
- 327 IAC 15-12-3

327 IAC ARTICLE 16. Confined Feeding Operations

- 1) The confined feeding operations article (327 IAC 16) applies to:

Answer

- (a) Any person who owns, designs, constructs, or closes a confined feeding operation.
- (b) Any person responsible for application of manure that is generated by a confined feeding operation onto the land in Indiana.
- (c) This article does not apply to a person who applies manure from a confined feeding operation in amounts of less than ten (10) cubic yards or two thousand (2,000) gallons in a calendar year.

327 IAC 16-1-1

- 2) Define “agronomic rate”

Answer

It means a rate of application of manure to the land based on:

- (a) The nutrient content of the manure to be applied;
- (b) The fertility level of the soil;
- (c) The nutrient needs of the current or planned crops;
- (d) The nutrient holding capacity of the soil; AND
- (e) Additional sources of nutrients, including legume credits, process wastewater, biosolids, or commercial fertilizer

327 IAC 16-2-1

- 3) Define “confined feeding”.

Answer

“Confined feeding” as defined in IC 13-11-2-39, means the confined feeding of animals for food, fur, or pleasure purposes in lots, pens, ponds, sheds, or buildings where:

- (a) Animals are confined, fed, and maintained for at least forty-five (45) days during any twelve (12) month period; AND
- (b) Ground cover or vegetation is not sustained over at least fifty percent (50%) of the animal confinement area.

The term does not include the following:

- (1) A livestock market where:
 - (A) Animals are assembled from at least two (2) sources to be publicly auctioned or privately sold on a commission basis; AND
 - (B) That is under state or federal supervision.
- (2) A livestock sale barn or auction market where animals are kept for not more than ten (10) days.

327 IAC 16-2-4

- 4) What is a “confined feeding operation”?

Answer

As defined in IC 13-11-2-40, it is any:

- (a) Confined feeding of at least:
 - (1) Three hundred (300) cattle;
 - (2) Six hundred (600) swine or sheep; OR
 - (3) Thirty thousand (30,000) fowl;
- (b) Animal feeding operation electing to be subject to IC 13-18-10; OR
- (c) Animal feeding operation that causes a violation of:
 - (1) Water pollution control laws;
 - (2) Any rules of the water pollution control board; OR
 - (3) IC 13-18-10

A determination by the department under this subdivision is appealable under IC 4-21.5.

327 IAC 16-2-5

5) What is “contaminated run-off”?

Answer

It is any precipitation or surface water that has come into contact with any liquid or solid animal excreta or any used bedding, litter, or waste liquid at the confined feeding operation. 327 IAC 16-2-7

6) Define “operating record”.

Answer

“Operating record” means the written record of the confined feeding operation activities required by 327 IAC 16 and kept by the owner/operator. 327 IAC 16-2-28

7) What are the performance standards for all confined feeding operations?

Answer

- (a) A confined feeding operation shall be managed to avoid an unpermitted discharge into waters of the state.
- (b) A confined feeding operation must be conducted in a manner that minimizes nonpoint source pollution entering waters of the state.
- (c) A confined feeding operation shall immediately take all reasonable steps to prevent spills or the discharge of manure in violation of the approval or this article, including seepage and leakage.
- (d) All waste management systems must be designed, constructed, and maintained to minimize leaks and seepage and prevent spills.
- (e) Manure to be staged or applied to land in Indiana must be staged or applied in such a manner as:
 - (1) Not to enter or threaten to enter waters of the state;
 - (2) To prevent:
 - (A) Run-off;
 - (B) Ponding for more than twenty-four (24) hours; AND
 - (C) Spills; AND
 - (3) To minimize nutrient leaching beyond the root zone.

327 IAC 16-3-1

8) Are confined feeding operations required to obtain an approval from IDEM?

Answer

Yes. Confined feeding operations must:

- (a) Have a valid approval to operate; OR
- (b) Close in accordance with 327 IAC 16-11.

327 IAC 16-4-1

9) Confined feeding operations must maintain what types of information?

Answer

- (a) A manure management plan.
- (b) An emergency spill response plan.
- (c) An operating record.

327 IAC 16-7&9

10) What are the requirements for a manure management plan?

Answer

- (a) A manure management plan must be developed and submitted to the commissioner that, at a minimum, contains the following:
 - (1) Procedures for soil testing as described in 327 IAC 16-7-11.
 - (2) Procedures for manure testing as described in 327 IAC 16-7-11.
 - (3) Legible maps of manure application areas.
- (b) If applicable, the manure management plan must also contain a description of any:
 - (1) Alternate methods proposed by the applicant for managing of the manure; AND
 - (2) Other practices to be used that assure the confined feeding operation meets the performance standards in this article.
- (c) A soil test must be obtained that provides sufficient information about soil fertility to allow for nutrient recommendations for existing or planned crops and to minimize nutrient leaching.
- (d) A manure test must be obtained that provides sufficient information about the manure content to allow for nutrient recommendations for existing or planned crops and to minimize nutrient leaching.
- (e) The frequency of soil and manure testing must:
 - (1) Be specified in the manure management plan; AND
 - (2) Be conducted a minimum of once every three (3) years unless a different frequency is justified in the manure management plan.
- (f) One (1) manure test must be conducted for each type of manure generated.
- (g) A manure management plan must be submitted to the department at least one (1) time every five (5) years and with any approval application and renewal application to maintain a valid approval for the confined feeding

operation. A copy of the current manure management plan must be reasonably accessible to a representative of the department during an inspection. 327 IAC 16-7-11

11) What are the requirements of an emergency spill response plan?

Answer

- (a) The owner/operator of a confined feeding operation shall:
 - (1) Develop an emergency spill response plan as described in 327 IAC 16-9-4(c);
 - (2) Keep it in the operating record;
 - (3) Implement the emergency spill response plan at any time a spill occurs; AND
 - (4) Familiarize all employees involved with manure handling with the emergency spill response plan.
- (b) The emergency spill response plan must be located at the confined feeding operation in a place accessible to all employees.
- (c) The emergency spill response plan must include the following:
 - (1) The names and telephone numbers of persons who are identified by the owner/operator as responsible for implementing the emergency spill response plan.
 - (2) Areas where potential spills can occur and their accompanying drainage points.
 - (3) Procedures to be followed in the event of a spill, including the following:
 - (A) Actions to contain or manage any spill of manure;
 - (B) Identification of the proper authorities to be contacted;
 - (C) Mitigation of any adverse effects of the spill.
 - (4) Identification of equipment and clean-up materials to be used in the event of a spill
 - (5) Procedures for reporting the spill to:
 - (A) The confined feeding operation owner/operator;
 - (B) Any applicable local emergency or health authorities; AND
 - (C) The department in accordance with 327 IAC 2-6.1.

327 IAC 16-9-4

12) What information must be added to the operating record and then must be updated and maintained?

Answer

- (a) All valid approvals, amendments, and notifications relevant to the approvals.
- (b) The current manure management plan.
- (c) The current emergency spill response plan.
- (d) The operating record must also contain all applicable records from the following:
 - (1) 327 IAC 16-9-1(e), regarding completed self-monitoring records for three (3) years.
 - (2) 327 IAC 16-10-1, regarding minimum acreage records.
 - (3) 327 IAC 16-10-2(c), regarding land application records for five (5) years.
 - (4) 327 IAC 16-10-5(c), regarding marketing and distribution records for three (3) years.
 - (5) Documentation of any spill response implemented in accordance with section 4(a)(3) of this rule by confined feeding operation personnel within the past five (5) years.

327 IAC 16-9-5

